

<110> Cheikh, Nordine
Liu, Jingdong
Peschke, Virginia M.

<120> Nucleic Acid Molecules And Other Molecules Associated With The
Phosphogluconate Pathway

<130> 04983.0031.US01/38-21(15365)B

<160> 699

<210> 1
<211> 233
<212> DNA
<213> Zea mays

<400> 1

gtttttgcag ttagtagaat atgttagtgg ctcctatgat agggtggaag gatttgagtt 60
attgaatgag gcaatctctg agtatgagac ttcagaaaac aatgactcgg gaagctaccg 120
cagattatctt tatttggcat tgcctccatc agtctaccca tcagtatgcg agatgataag 180
atcatattgc atgagtccat cttcacacac cggttggaca agggttattg ttg 233

<210> 2
<211> 180
<212> DNA
<213> Zea mays

<400> 2

tcgttcggca gcagcaacga ggtgctggat gggacgccga cgggagatgg ggcaccgggg 60
caggggacgc ggggagcgag caccgtcagc atcacggtcg tcggcgccctc cggcgacctc 120
gccaagaaga agatcttccc ggccctcttc gccttgttct acgagggctg gctcccggag 180

<210> 3
<211> 137
<212> DNA
<213> Zea mays

<400> 3

cacagatctt gatagggcca ctaatgagct tgtgatacgt gtgcaaccgg atgaagcaat 60
ttacctaaag attaacaaca agattcctgg tctcggatat cgactagata ggagtaactt 120
gaatctccat tatgccg 137

<210> 4
 <211> 263
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 4

gaagcacttt tggatgttgc gtcattgtctt gcaagcagtg ctcagaccca gaagggatgg 60
 aatcgcataa tatttgagaa gccatttggc tttgatgcac tttcttccca taggctgaca 120
 caatatcttc tttcaaaactt tcaggaaaag caaatatata gaattganca tctactagga 180
 aggaatcnca gtnaaaatcc tncaggttta agggtttcaa annnagnttt tgagccacct 240
 tngagnngna cntnnnnnga nna 263

<210> 5
 <211> 259
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 5

ctgtgttgag ttttcancc ttaaaaagac tntctcttct ctctcgtctc tttctctccc 60
 tgangcanna nancattagc atgcanancc agagtgggtc tagtaatccg gtgctgctag 120
 aggntgggaa ctagtgaatg gcatatcgag cgaagatcta gcttcggcac tgaatncccc 180
 ttagcaatan aggcangcca tgtgnctgaa actngtcact ctctattgtn gtgcttggcg 240
 cttntgggga tcttgctaa 259

<210> 6
 <211> 284
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 6

tggaatcgca taatatttga naagccattt ggctttgatg cactttcttc ccataggctg 60
 acacaatata ttctttcaaa ctttcaggaa aagcanatat atagaattga tcanctacta 120
 ggaaggaatc ncattgnaaa tcttacagtt tnaaggtttt caaatctagt ttttgagcca 180

ctttggagtc gtacttanat aagataatgt agcaggncat ttatcagagg ncttggctgt 240
gcatacctggg aagntattcn ntggctatgg gatnatccgt ganc 284

<210> 7
<211> 253
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 7

gagtgcgtga agaaaacacc aactgttttn agttttccaa ccttaaaaaag annnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnngaagcaa aanaanatta gcatcaaaac cagagtgggt 120
ctagtaatcc ggngctgcta gaggatggga actagtnaat ggcataatcga gcgaagatct 180
agcttcggca ctgaatcccc cttagcaaga gaggcaggaa atgtgcctga aactgggtca 240
ctctctattg ttg 253

<210> 8
<211> 137
<212> DNA
<213> Glycine max

<400> 8

ccaggcagta tataagacat ggacagttga tattctcaga agattttggc actgaaggac 60
gtggcgggta ctttgaccat tatggatatca tgagagacat tatgcagaat catttacttc 120
aaatactagc actcttt 137

<210> 9
<211> 287
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 9

caaccttaaa agactctctt ttctctctct gaactctgaa gcaaaacaac attaccagag 60
tggttctagt aattcagtgc tgctagaaga tggaaactag tgaatggcat atcgagcgaa 120
gatctagctt cggctctgaa tcccccttag caaganangc aggaaatgtg cctganactg 180
ggtcactctc tattgtggtg cttggngctt ctggtgatct tgctaagaag aagacatttc 240

ctgcactttt ccacctatac ctggcagggga ttcttaccac cagatga

287

<210> 10
<211> 251
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 10

cttttctctc tctgaactct gaagcnaaac aacattacca gagtggttct agtaattcag 60
tgctgctaga agatggaaac tagtgaatgg catatcgagc gaagatctag cttcggctct 120
gaatccccct agcaagagag gcaggaaatg tgcttgaaac tgggtcactc tctattgtgg 180
tgcttggtgc ttctggtgat cttgctaaga agaagacatt tctgcactt ttccacctat 240
acctgngnta c 251

<210> 11
<211> 193
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 11

gtttcagcta actctgcttc acttggtaat tgagtgggtc tagtaatccg gtgctgctag 60
aggatgggaa ctagtgaatg gcatatcgag cgaagatcta gcttcggcac tgaatcccc 120
ttagcaagat atgcaggaan tgtgcctgaa actgggtcac tctctattgt tgtgcttggc 180
gcttctgggg atc 193

<210> 12
<211> 318
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 12

gcgagccaag agcgtggaga ntngatggaa ccttaacctc gcagagcttg ccaggatntg 60
gaagggcggc tgcattatcc gtgcgaggtt ccttgatagg atcaagagcg cgtacgacag 120
gaatcctgag ctcgccaatg gcgcagccat ttgaggaatt ggttggtatg agcagggatg 180
ttttctgctt tgggtgattt ctctctgtgg gttatctttc cttttactat tgttatcttt 240

atgcttctag atccaagtcg agtacttcga ataatgctgt actgtatggt tggcaagtga 300
agaacattgt gtagcttc 318

<210> 13
<211> 467
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 13

ggccaagagc gcggagaaag gctgggggct caacccgctc gtccttcagc ccgctcagga 60
acctcgagtc caaggacgcc tcgatcgtag gagcggccac cgacagctcg gcggcctgct 120
gcaccgtcca cttccctgtc cctttcatcc cggctctgtc aaggaccttg tccaccaggt 180
agccatcgcc atgctcgtcc ttgatgccaa agatgtcggc cgtgatctcn atcaagaagc 240
tcaggagctc gcccttggtc cactcggaga acacctgggtg cagctcactg ttggtgagct 300
taccgaccga cttgagaacg tcgtatgcct nggaaatcaa ctgcatatcg gcatactcga 360
ttccgttggt gaaccatttt nacaaaantt ncccgatnca nctttngcca agtacgtnaa 420
acaaangggc cactttttta ggggccttta anaaancncc tttnnng 467

<210> 14
<211> 410
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 14

cccacgcgtc cgcggtcattg gggcagaacc ttgccctcaa cattgcagag aaagggttcc 60
ccatctctgt gtacaacagg acaacctcca aggtggacga gaccgtgcag cgtgccaaagg 120
cagaaggaaa cttccccgtc tacggcttcc atgacccgcg gtcctttgtg aagtccattc 180
agaagccacg ggtggtgatc atgctcgtca aggcgggcg gccagttgac cagaccatcg 240
cgacgctcgc agctcacttg gagcagggcg actgcatcat cgatgggggg aacgagtggg 300
acgagaacac ggagaggagg gagaaggcca tggaggagcg cggcctnctg tatcttggca 360
tgggtgtctc tggaggaaag gagggtgccc gcaacggccc gtccttgatg 410

<210> 15
 <211> 449
 <212> DNA
 <213> Zea mays

<400> 15

cccacgcgtc cgcccaacgcg ttcggttggt ttgacggtgc tggcatcgcc aattcaactc 60
 cgcacatctgca tcggcagcgc gccagctcca tagtgtagga ggagatggcg ctcacaagaa 120
 tcggtcttgc tggccttgcg gtcacggggc agaaccctgc cctcaacatt gcagagaaaag 180
 ggttccccat ctctgtgtac aacaggacaa ccttcaaggt ggacgagacc gtgcagcgtg 240
 ccaaggcaga aggaaacctt cccgtctacg gcttccatga ccccgcgcc tttgtgaagt 300
 ccattcagaa gccacgggtg gtgatcatgc tcgtcaaggc cggcgcgcca gttgaccaga 360
 ccatcgcgac gctcgcagct cacttggagc agggcgactg catcatcgat agggggaacg 420
 agtgggtacga gaacacggag aggagggag 449

<210> 16
 <211> 410
 <212> DNA
 <213> Zea mays

<400> 16

ggcactttcc ctgcctgatt ggcgatttaa gcggtggggg aggggaaggcc gatgggtcagt 60
 gaaagagagt aggtggacgg acggtgctgg catcgccaat tcaactccgc atctgcatcg 120
 gcagcgcgcc agctccatag tgtaggagga gatggcgctc acaagaatcg gtcttgctgg 180
 ccttgcggtc atggggcaga accttgccct caacattgca gagaaagggg tccccatctc 240
 tgtgtacaac aggacaacct ccaaggtgga cgagaccgtg cagcgtgcca aggcagaagg 300
 aaaccttccc gtctacggct tccatgaccc cgcgtccttt gtgaagtcca ttcagaagcc 360
 acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt gaccagacca 410

<210> 17
 <211> 409
 <212> DNA
 <213> Zea mays

<400> 17

aggtggccgg acggtgggtg catcgccaat tcaactccgc atctgaatcg gcaactcgga 60

gcgcgccagc tccatagtgt aggaggagga gatggcgctc acaagaatcg gtcttgctgg 120
 ccttgcggtc atggggcaga accttgccct caacattgca gagaaagggt tccccatctc 180
 tgtgtacaac aggacaacct ccaaggtgga cgagaccgtg cagcgtgccca aggcagaagg 240
 aaaccttccc gtctacggct tccatgaccc cgcgtccttt gtgaactcca ttcagaagcc 300
 acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt gaccagacca tcgcgacgct 360
 cgcagctcac ttggagcagg gcgactgcat catcgaatgg gggaacgag 409

<210> 18
 <211> 420
 <212> DNA
 <213> Zea mays

<400> 18

ggcggacgga cgggtgctggc atcgccaatt caacttcgca tctgcatcgg cagcgcgccca 60
 gctccatagg aggagatggc gctcacaaga atcgggtcttg ctggccttgc ggtcatgggg 120
 cagaaccttg ccctcaacat tgcagagaaa gggttcccca tctctgtgta caacaggaca 180
 acctccaagg tggacgagac cgtgcagcgt gccaaaggcag aaggaaacct tcccgtctac 240
 ggcttccatg accccgcgtc ctttgtgaag tccattcaga agccacgggt ggtgatcatg 300
 ctctgcaagg ccggcgcgcc agttgaccag accatcgga cgtcgcgagc tcacttggag 360
 cagggcgact gcatcatcga tagggggaac gagtggtagc aggacacgga gaggagggag 420

<210> 19
 <211> 403
 <212> DNA
 <213> Zea mays

<400> 19

agcggacgcg tgggggacgg acgggtgctgg catcgccaat tcaactccgc atctgcatcg 60
 gcagcgcgcc agctccatag tgtaggagga gatggcgctc acaagaatcg gtcttgctgg 120
 ccttgcggtc atggggcaga accttgccct caacattgca gagaaagggt tccccatctc 180
 tgtgtacaac aggacaacct ccaaggtgga cgagaccgtg cagcgtgccca aggcagaagg 240
 aaaccttccc gtctacggct tccatgaccc cgcgtccttt gtgaagtcca ttcagaagcc 300
 acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt gaccagacca tcgcgacgct 360

cgcagctcac tttgagcagg gcgactgcat catcgatggg ggg

403

<210> 20
<211> 433
<212> DNA
<213> Zea mays

<400> 20

ggcactttcc ctgcctgatt ggcgatttat agcggtgagg gaggaaggc cgatggtcag 60
ggaaagagag taggtggacg gacggtgctg gcatcgccaa ttcaactccg catctgcatc 120
ggcagcgcg cagctccata ggaggagatg gcgctcacia gaatcggtct tgctggcctt 180
gcggtcatgg ggcagaacct tgcctcaac attgcagaga aagggttccc catctctgtg 240
tacaacagga caacctcaa ggtggacgag accgtgcagc gtgccaaggc agaaggaaac 300
cttcccgctc acggttcca tgaccccgcg tcctttgtga agtccattca gaagccacgg 360
gtggtgatca tgctcgtaa ggccggcgcg ccagttgacc agaccatcg cgcgctcgca 420
gctcacttgg agc 433

<210> 21
<211> 209
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 21

gcatctgcat cggcagcgcg ncagnngnat aggaggagat ggcgctcaca agaatcggtg 60
ttgctggcct tgcggncatg gggcagaacc ttgccctnaa cattgcagag aaaggggnan 120
ccatatgtgt gnacaacagg acaacctgca aggtngacna gaccgtncag ngngncnagg 180
cagaangana ccttangntt tannnattg 209

<210> 22
<211> 271
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 22

caagaaggaa accttcctgt ntatggctac cataacccta aattctttgt ccaatccatt 60

cancaagcca agggtcataa taatgcttgt caaggctgnt gcacctgttg accaaaccat 120
 caagaccctc tcagcacact tnnccaaggg tgattgcac attgatgggtg gcaatgagtg 180
 gtatgagaac actgagagaa gagagaaagc gatgtccgaa ttgggtcttc tctaccttgn 240
 ggatgggagt ttcaggtggt gaagaagggtg c 271

<210> 23
 <211> 240
 <212> DNA
 <213> Glycine max

<400> 23

tctcgagcga atcggtctgg aggtacttta aagggttgg aatgaagaaa ggaaataatt 60
 gatcaccaat ctgcctggag gagagtgtt tgccttgcta tcaattccgg tattagcact 120
 ccaggttatt tcagggatag gattttgttc ctgactgtat tgcagtcacc gaatatggag 180
 caactaagga cggatatttg ggggtatatt atgggcaacg agaggttgga tgcgaattac 240

<210> 24
 <211> 242
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 24

ctgctctacc ttgggatggg agtttctggt ggtgaggaag gtgctctaatt ggtccctctt 60
 tgatgcctgg tggtcgttga ggcttcaaatt acatagaaga tattcttctc aagggtgcagc 120
 tcaagtccctg acagtgggtct tgcgtactat atnnnaaggt gnctggtaat ttgtcnatga 180
 tcacatggac gattgtgnat nantatgcaa ggcataattnt gagcatagca gtgcaataga 240
 tc 242

<210> 25
 <211> 263
 <212> DNA
 <213> Glycine max

<400> 25

cctgagttga gtttacatag ccacaacgtg gtgaagtttt atttatatta tttccaactg 60

aattgcttga tagtttgttt tccaactatg ttgtatcttt gctgatcatg ctttgtgctt 120
gatacaaaat tgtccagctc atgggtgcctt ttttaattttc acattttgat aagatttcct 180
tcagcgtcat ggatacatgt tatgttacac caggagtiga aattttttaca tttattgtta 240
acttgttgag tttaatgttg atc 263

<210> 26
<211> 253
<212> DNA
<213> Glycine max

<400> 26

ctctcaaata catagaagat attcttctca atgtggcagc tcaagtacct gacagtggtc 60
cttgcgtagac ttatcttggt aaaggtgggt ctggtaattt tgtgagagag attcaacaat 120
ggaatgagta atgggtgaatt cagctgaatt ccaaaggctt ataagggtccg gaattcagtt 180
ggaaagtggg caattgagga ctaacaaggg gctcctcgg attggacca ggaagacctc 240
cgaagttccc gga 253

<210> 27
<211> 229
<212> DNA
<213> Glycine max

<400> 27

cagaccttat tttttctgtc atttgcttca aatttcagga gattaattat gcgctcaacc 60
cacaacaaga ataggccttg ctggattggc tgtaaatggg caaatctgg cactcaatat 120
tgcttgaaaa gggcttccca attccggtta acaacggaac catttccaag gttattgggc 180
cataagacga agcaaaccag gaaggaaacc ttcaatttat ggggaacaa 229

<210> 28
<211> 250
<212> DNA
<213> Glycine max

<400> 28

aatgaatctg atcagggcaa agagcattga gaaagggttg gacttgaagt tgggggaact 60
tgcaaggatt tggaaagggg gttgcatcat aagagcaata tttttggaca gaatcaagaa 120

agcatacgac agaaatccta accttgcaaa ctttcttggt gatccagaat ttgcaaagga 180
aatagtggat agacaatctg catggagaag agttgtgtgt cttgctatca actatggcac 240
tagcacacca 250

<210> 29
<211> 87
<212> DNA
<213> Glycine max

<400> 29

ggctcgaggg ggtcttacca cactgagtgg ttcaagcttg ccaaacagtc aagaaattag 60
agtactgtag tgcagccaat caggatc 87

<210> 30
<211> 256
<212> DNA
<213> Glycine max

<400> 30

attcttctca aggtggcagc tcaagtcctt gacagtggtc cttgcgtgac ttatattggt 60
aaaggtggct ctggtaattt tgtgaaaatg atccacaatg gcatcgaata tggatgacatg 120
cagctgattg cagaggccta tgatgtgctg aagtcagttg gaaagtgtgc aaatgaggaa 180
ctacaaagtg tcttctcaga atggaacaag ggagaacttc tgagtttctt gattgaaatc 240
actgcagata tatttg 256

<210> 31
<211> 213
<212> DNA
<213> Glycine max

<400> 31

gcgtgactta tattggtaaa ggtggctctg gtaattttgt gacaatgac cacaatggca 60
tcgaatctgg tgacatgcag ctgattgcag aggcctatga tgtgctgaag tcagttggaa 120
agttgtcaaa tgaggaacta caaagtgtct tctcagaatg gaacaaggga gaacttctcg 180
agtttctctga ttgacatcac tgcagatata ttt 213

<210> 32

<211> 268
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 32

gtggcagctc aagtcctga cagtgtcct tgcgtgactt atattggtaa aggtggctct 60
 ggtaattttg tgaaaatgat ccacaatggc atcgaatatg gtgacatgca gctgattgca 120
 gaggcctatg atgtgctgaa gtcagttgga aagttgtcaa atgaggaact acaaagtgtc 180
 tcctcagaat ggaacaaggg agaattctga gtttccgatt ganatcatgc agatatattg 240
 gattcangag ataagggaga nggatacc 268

<210> 33
 <211> 109
 <212> DNA
 <213> Glycine max
 <400> 33

aaattttgtg aaaatgatcc acaatggaat tgagtatggt gacatgcagc tcattgctga 60
 ggcctatgat gtgctaaagt cggttggaaa gttgtcaaat gaggagctg 109

<210> 34
 <211> 277
 <212> DNA
 <213> Glycine max
 <400> 34

gggcactggt aagtggactg ttcagcaagg tgctgaatta tcaattgctg ctcccactat 60
 tgaagcatca ttggatgcaa gggttcctgag tgggttgaag gaggaaagag ttgaagctgc 120
 aaaggtcttt aaatcaggtg gtattggtga tatcgtgact gatcaacctg tagacaagaa 180
 aaaattgggt gatgatgtta ggaaggctct ttatgcagcc aaaatctgta gttatgcaca 240
 gggaatgaat ttgatccgtg caaagagtat tgaaaag 277

<210> 35
 <211> 252
 <212> DNA
 <213> Glycine max
 <400> 35

gcaagggttcc tgagtgggtt gaaggaggaa agagttgaag ctgcaaaggt ctttaaataca 60
 ggtggcattg gtgatattgt gactgatcaa cctgtagaca agcagaagtt gattgatgat 120
 gttaggaagg ctctttatgc agccagaatc tgtagttatg cacagggaat gaatttgatc 180
 cgtgcaaaga gtattgaaaa gggttgggat ttgaagttgg gtgaactggc ccggatttgg 240
 aaaggggggtt gc 252

<210> 36
 <211> 262
 <212> DNA
 <213> Glycine max

<400> 36

cttggtgaca aggtcctaga caagactggc atgaagggca ctggtcaagt ggactgggca 60
 gcaagctgct gaattatcaa ttgctgctcc cactattgaa gcatcattgg atgcaagggt 120
 cctgagtggg ttgaaggagg aaagacttga agctgcaaag gtctttaaat cagggtggtat 180
 tgctgatatc gtgactgatc aacctgtaga caagaaaaaa ttggttgatg atgttaggaa 240
 ggctctttat gcagccaaaa tc 262

<210> 37
 <211> 241
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 37

tttggaaatta aggatgataa gggagatgga tatcttggtg acaaggctcct agacaagact 60
 ggcatgaagg gcactggtaa gtggactggt cagcaagctg ctgaattatc aattgctgct 120
 cccactattg angcatcatt ggatgcaagg ttcttgagtg ggttgaagga ggaagagttg 180
 aagctgcaaa ggtctttaaa tcagggtggta ttggtgatat cgtgactgat caacctgtag 240
 a 241

<210> 38
 <211> 239
 <212> DNA
 <213> Glycine max

<400> 38

aaagtgtctt ctcagaatgg aacaagggag aacttctgag tttcctgatt gaaatcactg 60
cagatatatt tggaattaag gatgataagg gagatggata tcttggtgac aagcgtccta 120
gacaagactg gcatgaaggg cactggtaag tggactgttc agcaagctgc tgaattatca 180
attgctgctc ccactattga agcatcattg gatgcaaggg tcctgagtgg ggtgaagga 239

<210> 39

<211> 252

<212> DNA

<213> Glycine max

<400> 39

ggagatggat tcttggtgac aaggtcctag acaagactgg catgaagggc actggtaagt 60
ggactgttca gcaagctgct gaattatcaa ttgctgctcc cactattgaa gcatcattgg 120
atgcaagggtt cctgagtggg ttgaaggagg aaagagttga agctgcaaag gtcttttaat 180
caggtgggtat tggatgatc gtgactgatc aacctgtaga caagaaaaaa ttggttgata 240
tgtaggaag gc 252

<210> 40

<211> 262

<212> DNA

<213> Glycine max

<400> 40

ctcgagccgt tcttagacag aatcaagcag gcatatgaaa gaaccctaa tctggcaaac 60
cttcttggtg atccagagtt tgcaaaggaa ataattgatt accaatctgc ctggaggaga 120
gttggttgcc ttgctatcaa ttctggtatt agcactccag gtatgtctgc tagtcttgct 180
tattttgaca cttacagaag ggaaagggtg ccagctaatt tgggtgcaagc tcaacgagac 240
tactttggtg ctcatacata tg 262

<210> 41

<211> 167

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 41

accttcttgt ggatccagag ttgcaangg aaataatcga tcgccaatct gcctggagga 60
 gagttgtttg ccttgctatc aattctggta tcagcactcc aggtatgtct gctagtctng 120
 cttatnttga cacttacaga agggaaaggt nncagctaa ttgggtg 167

<210> 42
 <211> 230
 <212> DNA
 <213> Glycine max

<400> 42

gtgatagcga tgtccgaatt gggctcttctc taccttggga tgggagtttc aggtggtgaa 60
 gaagggtcaa gacatgggcc ctctttgatg cctggtggtt cattcgagga ctacaagtac 120
 atagaagaca ttctcctcaa ggtagacgca caagtcctg atagtgggtca ttgtgtgacc 180
 tacatcggca aagggtggatc aggaaatttt gtgaaaatga tccacaatgg 230

<210> 43
 <211> 245
 <212> DNA
 <213> Glycine max

<400> 43

gtgaaagcga tgtccgaatt gggctcttctc taccttggga tgggagtttc aggaggtgaa 60
 gaagggtcaa gacatgggcc ctctttgatg cctggtggtt cattcgagga ctacaagtac 120
 atagaagaca ttctcctcaa ggtggccgca caagtcctg atagtgggtcc ttgtgtgacc 180
 tacatcggca aagggtggatc aggaaatttt gtgaaaatga tccacaatgg aattgagtat 240
 ggtga 245

<210> 44
 <211> 289
 <212> DNA
 <213> Glycine max

<400> 44

atctgcctgg aggagagttg ttgaccttgc tatcaattct ggtattagca ctccaggtat 60
 gtctgctagt cttgcttatt ttgacactta cagaaggga aggttgccag ctaatttgggt 120
 gcaagctcaa cgagactact ttggtgctca tacatatgaa agggttgaca tagaggggtc 180

ttaccatact gagtgggttca agcttgccaa acagtcaaga aattagatta ctgtatttga 240
gccatcagga ttttcctaata aaatgtaata ttgtctgctc agactgtat 289

<210> 45
<211> 272
<212> DNA
<213> Glycine max

<400> 45

tcaggatatgt ctgctagtct tgcttatttt gacacttaca gaagggaaag gttgccagct 60
aatttgggtgc aagctcaacg agactacttt ggtgctcata catatgaaag ggttgacata 120
gaggggtctt accatactga gtggttcaag cttgccaaac agtcaagaaa ttagattact 180
gtatttgagc caatcaggat tttcctaata aatgtaatat tttctgctca gactgtatgc 240
tgagttgagt ttgcatatcc acaatgtggt ga 272

<210> 46
<211> 246
<212> DNA
<213> Glycine max

<400> 46

ctaagataca acatagttgg aaaacaaact atcaagcaat tcagttggaa ataataaaa 60
taaaaacttca ccacgttgtg gctatgtaaa ctcaactcag catacagtct gagcagaaaa 120
cattacattt attaggaaaa tcctgattgg ttcaaataca gtaatctaaa ttctagactg 180
tttggaagc ttgaaccact cagtatggta agaccctct atgtcaacca ttcatatgta 240
tgagca 246

<210> 47
<211> 156
<212> DNA
<213> Glycine max

<400> 47

ggggtcttac catactgagt ggttcaagct tgccaaacag tcaagaaatt agattactgt 60
atttgagcca atcaggattt tctaataaaa tgtaatat tctgctcaga ctgtatgctg 120
agttgagttt gccaaagcaat tcagttggaa ataatg 156

<210> 48
 <211> 250
 <212> DNA
 <213> Glycine max

<400> 48

tatggctacc atgaccccgga agcttttgtt cattccattc aaaagcctag ggtgataata 60
 atgcttggtta aggctggggc acctgttgac cagaccatta agaccctatc tgcatacatg 120
 gaaaaagggtg actgcataat tgatgggtggt aacgaatggt acgagaacac cgaaaggaga 180
 gagaaatcgg tggctgaatt gggctctgctc taccttggga tgggagtttc tgggtggtgag 240
 gaaagtgctc 250

<210> 49
 <211> 170
 <212> DNA
 <213> Glycine max

<400> 49

ggcacctgtt gaccagacca ttaagaccct atctgcatac atggaaaaag gtgactgcat 60
 aattgatggt ggtaacgaat ggtacgagaa caccgaaaga agagagaaat cgggtggctga 120
 attgggtctg ctctaccttg ggatgggagt ttctggtggt gaggaagggtg 170

<210> 50
 <211> 275
 <212> DNA
 <213> Glycine max

<400> 50

gacgacagaa gggagaaatc ggtggctgaa ttgggtctgc tctacctcgg gatgggagtt 60
 tctggtggtg aggaagggtgc tcgtaatggt ccctctttga tgcctggtgg ttcgtttgag 120
 gctttcaaata acatagaaga tattcttctc aagggtggcag ctcaagtccc tgacagtgggt 180
 ccttgcggtga cttatattgg taaagggtggc tctggttaatt ttgtgaaaat gatccacaat 240
 ggcatcgaat atggtgacat gcagctgatt gcaga 275

<210> 51
 <211> 256

<212> DNA
 <213> Glycine max

<400> 51

acggctgcga gaagacgaca gaaggggggaa aaaggtgact gtataattga tggtaggtaac 60
 gaatggtatg agaacactga aagaagagag aaagaggtgg ctgaattggg tctgctctac 120
 cttgggatgg gagtttctgg tggtagaggaa ggtgctcgta atggtccctc tttgatgcct 180
 ggtggttcgt ttgaggcttt caaatacata gaagatattc ttctcaaggt ggcagctcaa 240
 gtacctgaca gtggtc 256

<210> 52
 <211> 252
 <212> DNA
 <213> Glycine max

<400> 52

gactgccata ttgatggtgg taacgaatgg tacgagaaca ccgaaagaag agagaaatcg 60
 gtggctgaat tgggtctgct ctaccttggg atgggagttt ctggtggtga ggaagggtgct 120
 cgtaatggtc ctctttgatg cctggtgggtt cgtttgaggc tttcaaatac atagaagata 180
 ttctttctcaa ggtggcagct caagtccctg acagtgggtcc ttgcgtgact tatattggta 240
 aaggtaggctc tg 252

<210> 53
 <211> 346
 <212> DNA
 <213> Glycine max

<400> 53

gtgaagttaa ggaaatcaat tatggctcaa ccctcaacaa gaatagggcc ttgctggact 60
 ggctgttatg ggccaaaatc tagcactcaa tattgctgag aaaggctttc ccatttctgt 120
 ttataaccga accacttcca aggttgatga gactgtagaa cgagcaaaac aagaaggaaa 180
 tcttccagtt tatggctacc atgaccccgga agcttttggt cattccattc aaaagcctag 240
 ggtgataata atgcttggtta aggctggggc atctgttgac cagaccatta agaccctatc 300
 tgcatacatg gaaaaagggtg actgcataat tgatggtggt aacgaa 346

<210> 54
 <211> 283
 <212> DNA
 <213> Glycine max

<400> 54

ccagacctta atttttctct cattcgcttc aaatttcagg aaatcaatta tggctcaacc 60
 ctcaacaaga ataggccttg ctggactggc tgttatgggc caaaatctag cactcaatat 120
 tgctgagaaa ggctttccca tttctgttta taaccgaacc acttccaagg ttgatgagac 180
 tgtagaacga gcaaaaacaag aaggaaatct tccagtttat ggctaccatg accccgaagc 240
 tttgttcatt ccattcaaaa gcctaggggtg ataataatgc ttg 283

<210> 55
 <211> 276
 <212> DNA
 <213> Glycine max

<400> 55

caaatttcag gaaatcaatt atggctcaac cctcaacaag aataggcctt gctggactgg 60
 ctgttatggg ccaaaatcta gcactcaata ttgctgagaa aggctttccc atttctgttt 120
 ataaccgaac cacttccaag gttgatgaga ctgtagaacg agcaaaacag gaaggaaatc 180
 ttccagttta tggctaccat gaccccgaag cttttgttca ttccattcaa aagcctaggg 240
 tgataataat gcttggttaag gctggggcac ctgttg 276

<210> 56
 <211> 289
 <212> DNA
 <213> Glycine max

<400> 56

cagaccttaa ttgttctctc attcgcttca aatttcagga aatcaattat ggctcaaccc 60
 tcaacaagaa taggccttgc tggactggct gttatgggcc aaaatctagc actcaatatt 120
 gctgagaaaag gctttcccat ttctgtttat aaccgaacca cttccaagggt tgatgagact 180
 gtagaacgag caaaacaaga aggaaatctt ccagtttatg gctaccatga ccccgaagct 240
 tttgttcatt ccattcaaaa gcctaggggtg ataataatgc ttgttaagg 289

<210> 57
 <211> 267
 <212> DNA
 <213> Glycine max

 <400> 57

 cctcattcgc ttcaaatttc aggaaatcaa ttatggctca accctcaaca agaataggcc 60
 ttgctggact ggctgttatg ggccaaaatc tagcactcaa tattgctgag aaaggctttc 120
 ccatttctgt tttaaccgaa ccacttccaa ggttgatgag actgtagaac gagcaaaaca 180
 agaaggaaat ctccagttt atggctacca tgaccccgaa gcttttgttc attccattca 240
 aaagcctagg gtgataataa tgcttgt 267

<210> 58
 <211> 260
 <212> DNA
 <213> Glycine max

 <400> 58

 ccagacctta atttttctct cattcgttc aaatttcagg aaatcaatta tggctcaacc 60
 ctcaacaaga ataggccttg ctggactggc tggtatgggc caaatctag cactcaatat 120
 tgctgagaaa ggctttccca tttctgttta taaccgaacc acttccaagg ttgatgagac 180
 tgtagaacga gcaaaacaag aaggaaatct tccagtttat ggctaccatg accccgaagc 240
 ttttgttcat tccattcaaa 260

<210> 59
 <211> 260
 <212> DNA
 <213> Glycine max

 <400> 59

 tgtgattcca gaccttaatt tttctctcat tcgcttcaaa tttcaggaaa tcaattatgg 60
 ctcaaccctc aacaagaata ggcttgctg gactggctgt tatgggcaa aatctagcac 120
 tcaatattgc tgagaaaggc tttccattt ctgtttataa ccgaaccact tccaagggtg 180
 atgagactgt agaacgagca aaacaagaag gaaatcttcc agtttatggc taccatgacc 240
 ccgaagcttt tgttcattcc 260

<210> 60
 <211> 265
 <212> DNA
 <213> Glycine max

<400> 60

cagaccttaa tttttctctc attcgcttca aatttcaggg gatcaattat ggctcaaccc 60
 tcaacaagaa tatgccttgc tggactggct gttatgggcc agaattctagc actcaatatt 120
 gctgagaaaag gctttcgcat ttctgtttat aaccgaacca cttccaaggt tgatgagact 180
 gtagaacgag caaaacaaga aggaaatctt ccagtttatg gctaccatga ccccgaagct 240
 tttgttcatt ccattcaaaa gccta 265

<210> 61
 <211> 263
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 61

ctagacctta atttttctct cattcgcttc aaatttcagg aaatcaatta tggctcaacc 60
 ctcaacaaga ataggccttg ctggactggc tggtatgggt ccaaattctag cactcaatat 120
 tgctgagaaa ggctttccca tttctgttta taaccgaacc acttccaagg ttgatgagac 180
 tgtagaacta gcannacaag aaggaaatct tccagtttat ggctaccatg accccgaagc 240
 ttttgttcat tccattcaaa agc 263

<210> 62
 <211> 279
 <212> DNA
 <213> Glycine max

<400> 62

tgctctgtga ttccagacct taatttttcc ctcatctgct tcaaatttca ggaaatcaat 60
 tatggctcaa ccctcaacaa gaataggcct tgcacctctg gctgttatgg gccaaaatct 120
 agcactcaat attgctgaga aaggctttcc catttctggt tataaccgaa ccacttccaa 180
 gggtgatgag actgtagaac gagcaaaaaca agaaggaaat cttccagttt atggctacca 240
 tgaccccgaa gcttttgttc attccattca aacgcctag 279

<210> 63
 <211> 284
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 63

tgattccaga ccttaatfff tctctcattc gcttcaaatt tcaggaaatc aattatggct 60
 caaccctcaa caagaatagg ccttgctgga ctggctgtta tgggccaaaa tctagcactc 120
 natattgctg agaaaggctt tcccatttct gnttataacc gnaccacttc caaggntgat 180
 gagactgtag nacgagcnaa acaggaagga aatcttccag tttatggcta ccatgacccc 240
 gnagctttgt tcattccatt caaaagctag ggtgataata atgc 284

<210> 64
 <211> 256
 <212> DNA
 <213> Glycine max
 <400> 64

gtgattccag accttaatfff ttctctcatt cgcttcaaatt ttcaggaaat caattatggc 60
 tcaaccctca acaagaatag gccttgctgg actggctgtt atgggccaaa atctagcact 120
 caatattgct gagaaaggct ttcccatttc tgtttataac cgaaccactt ccaaggttga 180
 tgagactgta gaacgagcaa aacaggaagg aaatcttcca gtttatggct accatgaccc 240
 cgaagctttt gttcat 256

<210> 65
 <211> 265
 <212> DNA
 <213> Glycine max
 <400> 65

cogtgctctg tgattccaga ccttaatfff tctctcattc ccttcaaatt tcaggaaatc 60
 aattatggct caaccctcaa caagaatagg ccttgctgga ctggctgtta tgggccaaaa 120
 tctagcactc aatattgctg agaaaggctt tcccatttct gtttataacc gaaccacttc 180
 caaggntgat gagactgtag aacgagcaaa acaagaagga aatcttccag tttatggcta 240
 ccatgacccc gaagcttttg ttcac 265

<210> 66
 <211> 275
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 66

gtgattccca gaccttattt nttctgtcat ttgcttcaaa tttcaggaga ttaattatgg 60
 ctcaacccan aacaagaata ggccttnctg gattggctgt tatgggccaa aatctggcac 120
 tcaatattgc tgagaaaggc ttncccatth ctgtttacaa ccgaaccact tccaaggttg 180
 atgagacagt agaacgagca aaacaagaag gaaatcttcc agtttatggc taccatgacc 240
 ctgaagcttt tgttcattcc attcaanagc ctagg 275

<210> 67
 <211> 236
 <212> DNA
 <213> Glycine max
 <400> 67

cagaccttaa tttttctctc attcgcttca aatttcagga aatcaattat ggctcaaccc 60
 tcaacaagaa taggccttgc tggactggct gttatgggcc aaaatctagc actcaatatt 120
 gctgagaaaag gctttcccat ttctgtttat aaccgaacca cttccaagggt tgatgagact 180
 gtagaacgag caaaacagga aggaaatctt ccagtttatg gctaccatga cccoga 236

<210> 68
 <211> 280
 <212> DNA
 <213> Glycine max
 <400> 68

cacagacctt atgatttctg tcattttacat caaatttcag gagattaatt atggctcaac 60
 ccataacaag aataggcctt gctggattgg ctgttatggg ccaaaatctg gcactcaata 120
 ttgctgagaa aggctttccc attctgttta caaccgaacc acttccaagg ttgatgagac 180
 agtagaacga gcaaaacaag aaggaaatct tccagtttat ggctaccatg accctgaagc 240
 ttttgttcat tccattcaaa agcctagggt gatactaattg 280

<210> 69
 <211> 281
 <212> DNA
 <213> Glycine max

<400> 69

ctgtgattcc cagaccttat tttttctgtc atttgcttca agtctcagga gattgattat 60
 ggctcaaccc acaacaagaa taggccttgc tggattggct gttatgggcc aaaatctggc 120
 actcaatatt gctgagaaag gctttcccat ttctgtttac aaccgaacca cttccaaggt 180
 tgatgagaca gtagaacgag caaaacaaga aggaaatctt ccagtttatg gctaccatga 240
 ccctgaagct tttgttcatt ccattcaaaa gcctaggggtg a 281

<210> 70
 <211> 261
 <212> DNA
 <213> Glycine max

<400> 70

gattcccaga ccttattttt tctgtcattt gcttcaaatt tcaggagatt aattatggct 60
 caaccacaa caagaatagg ctttgctgga ttggctgtta tgggccaaaa tctggcactc 120
 aatattgctg agaaaggctt tcccatttct gtttacaacc gaaccacttc caaggttgat 180
 gagacagtag aacgagcaaa acaagaagga aatcttccag tttatggcta ccatgaccct 240
 gaagcttttg ttcattccat t 261

<210> 71
 <211> 225
 <212> DNA
 <213> Glycine max

<400> 71

cttaatttgt ctctcattcg cttcaaattt caggaaatca attatggctc gaccctcgac 60
 aagaataggc cttgctggac tggctgttat ggggcaaaat ctagcactca atattgctga 120
 gaaaggcttt cccatttctg tttataaccg aaccacttcc aaggttgatg agactgtaga 180
 acgagcaaaa caagaaggaa atcttccagt ttatggctac catga 225

<210> 72

<211> 265
 <212> DNA
 <213> Glycine max

<400> 72

ccagacctta atttttctct cattcgcttc agctttcagg aaatcaatta tggctcaacc 60
 ctcaacaaga ataggccttg ctggactggc tgttatgggc caaaatctag cactcaatat 120
 tactgagaaa ggctgtccca tttctgttta taaccgaacc acttccaagg ttgatgagac 180
 tgcagaacga gcaaaacaag aaggacatct tccagtttat ggctaccatg accccgaagc 240
 ttttgttcat tccattcaaa agccc 265

<210> 73
 <211> 288
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 73

cccgcattctt ttgatccgtg ctctgtgatt ccagacctt atttntnctg tcatttgctt 60
 caaatntcag gagattaatt atggctcaac ccacaacaag aataggcctt gctggattgg 120
 gctgttatgg gccaaaatct ggcaactcaat attgctgaga aaggctttcc catttctggt 180
 tacanccgaa ccacttccaa ggttgatgag acagtagaac gagcaaanca aganggaaat 240
 cttccagttt atggctacca tgaccctgaa gcttttgttc nttccatt 288

<210> 74
 <211> 259
 <212> DNA
 <213> Glycine max

<400> 74

gatccgtgct ctgtgattcc cagaccttat tttttctctc atttgcttca aatttcagga 60
 gattaattat ggctcaaccc acaacaagaa taggccttgc tggattggct gttatgggcc 120
 aaaatctggc actcaatatt gctgagaaag gctttcccat ttctgtttac aaccgaacca 180
 cttccaaggt tgatgagaca gtagaacgag caaaacaaga aggaaatctt ccagtttatg 240
 gctaccatga ccctgaagc 259

<210> 75
 <211> 250
 <212> DNA
 <213> Glycine max

<400> 75

tccagacctt aatttttctc tcattcgctt caaatttcag gaaatcaatt atggctcaac 60
 cctcaacaag aataggcctt gctggactgg ctgttatggg ccaatatcta gcactcaata 120
 ttgctgagaa aggtttccca tttctgttta taaccgaacc acttccaagg ttgatgagac 180
 tgtagaacga gcaaaaacaag aaggaaatct tccagtttat ggctaccatg accccgaagc 240
 ttttgttcat 250

<210> 76
 <211> 220
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 76

cnagacctta atttttctct cattcgcttc aaatttcagg aaatcaatta tggctcaacc 60
 ctcaacaaga ataggccttg ctggactggc tggttatgggc caaaatctag cactcaatat 120
 tgctgagaaa ggctttccca tttcgnonta taaccgaacc acttccaagg ttgatgagac 180
 tgtagaacga gcaaaaacaag aaggaaatct tccagtttnt 220

<210> 77
 <211> 230
 <212> DNA
 <213> Glycine max

<400> 77

tgtgattcca gaccttaatt tttctctcat tcgcttcaaa tgtcaggaaa tcaagtatgg 60
 ctcaaccctc cacaagagta ggccttgctg gactggctgt tatgggcccc aatctagcac 120
 tcaatattgc tgagaaaggc tttcccattt ctgtttataa ccgaaccact tccaagggtg 180
 atgagactgt agaacgagca aaacctgaag gcaatcttcc agtttatggc 230

<210> 78
 <211> 259
 <212> DNA

<213> Glycine max

<400> 78

cttatttttt ctgtcatttg cttcaaattt caggagatta attatagctc aaccacacac 60
aagaataggc cttgctggat tggctgttat gggccaaaat ctggcactca atattgctga 120
gaaaggcttt cccatttctg ttacaaccg aaccacttcc aaggttgatg agacagtaga 180
acgagcaaaa caagaaggaa atcttccagt ttatggctac catgaccctg aagcttttgt 240
tcattccatt caaaagcct 259

<210> 79

<211> 256

<212> DNA

<213> Glycine max

<400> 79

cttttgatcc gtgctctgtg attcccagac cttatttttt ctgtcatttg cttcaaattt 60
caggagatta attatggctc aaccacacac aagaataggc cttgctggat tggctgttat 120
gggccaaaac tggcactcaa tattgctgag aaaggctttc ccatttctgt ttacaaccga 180
accacttcca aggttgatga gacagtagaa cgagcaaaac aagaaggaaa tcttccagtt 240
tatggctacc atgacc 256

<210> 80

<211> 253

<212> DNA

<213> Glycine max

<400> 80

cccagacctt attttttctg tcatttgctt caaatctcag gagataatta tggctcaacc 60
cacaacaaga ataggccttg ctggattggc tggtatgggc caaaatctgg cactcaatat 120
tgctgagaaa ggctttccca tttctgttta caaccgaacc acttccaagg ttgatgagac 180
agtagaacga gcataacaag aaggaaatct tccagtttat ggctaccatg accctgaagc 240
ttttgttcat tcc 253

<210> 81

<211> 198

<212> DNA

<213> Glycine max

<400> 81

ccagacctta atttttctct cattcgcttc aaatttcagg aaatcaatta tggtcaacc 60
ctcaacaaga ataggccttg ctggactggc tggtatgggc caaaatctag cactcaatat 120
tgctgagaaa ggctttccca tttctgttta taaccgaacc acttccaagg ttgatgagac 180
tgtagaccga gcaaaaca 198

<210> 82

<211> 281

<212> DNA

<213> Glycine max

<400> 82

atataatata catacatata tatataactt attccccgc atcttttgat cegtgtcttg 60
tgattcccag accttatttt ttctgtcatt tgcttcaaatt ttcaggagat taattatggc 120
tcaaccacaca acaagaatag gccttgctgg attggctggt atgggccaaa atctggcact 180
caatattgct gagaaaggct ttcccatctt tgtttacaac cgaaccactt ccaaggttga 240
tgagacagta gaacgagcaa aacaagaagg aaatcttcca g 281

<210> 83

<211> 245

<212> DNA

<213> Glycine max

<400> 83

tcgatcgggt atcacatctg aattgggact gctcctattc tgggtactat tctgagaata 60
attatggctc aaccacacaac aagaataggc cttgctggat tggctgttat gggccaaaat 120
ctggcactca atattgctga gaaaggcttt cccatttctg tttacaaccg aaccacttcc 180
aaggttgatg agacagtaga acgagcaaaa caagaaggaa atcttccagt ttatggctac 240
catga 245

<210> 84

<211> 230

<212> DNA

<213> Glycine max

<400> 84

aaccgaacca cttccaaggt tgtaaacaga aatgggaaag cttttctcag caatattgag 60
tgccagattt tggcccataa cagccaatcc agcaaggcct attcttggtg tgggttgagc 120
cataattaat ctctgaaat ttgaagcaaa tgacagaaaa aataaggtct gggaatcaca 180
gagcacggat caaaagatgc gggggaataa gttatatata tatgtatgta 230

<210> 85

<211> 88

<212> DNA

<213> Glycine max

<400> 85

ggctcgagct cagtcgcttc aaatttcagg aaatcaatta tggctcaacc ctcaacaaga 60
ataggccttg ctggactggc tgttatgg 88

<210> 86

<211> 202

<212> DNA

<213> Glycine max

<400> 86

caaaaagcaa tctagctttg catactctac ctctacttca cctcgttacc aaaactagca 60
atcatgtctg tcgagcccaa gggagatgtc ggactcattg gtctggccgt tatgggtcaa 120
aacctgatcc tcaacatgaa cgacaagggt ttcaccgtcg tcgcctacaa ccgaaccacc 180
tccaaggctg accacttcct gg 202

<210> 87

<211> 173

<212> DNA

<213> Glycine max

<400> 87

caaaaagcaa tctagctttg catactctac ctctacttca cctcgttacc aaaactagca 60
atcatgtctg tcgagcccaa gggagatgtc ggactcattg gtctggccgt tatgggtcaa 120
aacctgatcc tcaacatgaa cgacaagggt ttcaccgtcg tcgcctacaa ccg 173

<210> 88

<211> 237
 <212> DNA
 <213> Glycine max

<400> 88

aggaaacgcc tttcctgaga agtcggaagg aagagagtga gagtgagagt gagagtgaga 60
 gagatggagt ttggattttt gggtttgggg ataatgggta aggctatggc aatcaatctg 120
 ctacgccatg gcttcaaggt cactatttgg aacagaaccc tctccaagtg tgatgaactc 180
 gtgcaacatg gtgcttcagt tggagaaacc ccagcaactg tagtcaagaa atgcaag 237

<210> 89
 <211> 255
 <212> DNA
 <213> Glycine max

<400> 89

gattggtggt aacttgga aataccatgg ctcaacctgc aagcctcaca agaataggcc 60
 ttgctggcct ggctgtgatg ggccaaaacc ttgctctcaa cattgctgag aaaggctttc 120
 ccatttctgt ctacaaccgg accgcgtcca aggttgatga gacagttgaa agagcaaaac 180
 aagaaggaaa ccttcctgtg tatggctacc atgaccctaa attctttgtc caatccattc 240
 aaaagccaag ggtca 255

<210> 90
 <211> 256
 <212> DNA
 <213> Glycine max

<400> 90

ctttctcgca tgaattttcg aacattgaac aggaaattaa ccatggctca acctgcaagc 60
 ctcacaagaa taggccttgc tggcctggct gtgatgggcc aaaaccttgc tctcaacatt 120
 gctgagaaaag gctttcccat ttctgtctac aaccggaccg cgtccaaggt tgatgagaca 180
 gttgaaagag caaaacaaga aggaaacctt cctgtgtatg gctaccatga ccctaaattc 240
 tttgtccaat ccattc 256

<210> 91
 <211> 256
 <212> DNA

<213> Glycine max

<400> 91

cacccagatc tcaattttct gcaatttcac tcagaccagg aaattaacca tggctcaacc 60
tgcaagcctc acaagaatag gccttgctgg cctggctgtg atgggccaaa accttgctct 120
caacattgct gagaaaggct ttcccatttc tgtctacaac cggaccgcgt ccaaggttga 180
tgagacagtt gaaagagcaa aacaagaagg aaaccttcct gtgtatggct accataaccc 240
taaattcttt gtccaa 256

<210> 92

<211> 249

<212> DNA

<213> Glycine max

<400> 92

cgatgccaca acttctgtgt tggattggtg gtacactgga aattaaccat ggctcaaaca 60
acaagcctca caagaatagg ccttgctggc ctggctgtga tgggccaaaa ccttgctctc 120
aacattgctg agaaaggctt tcccatttct gtctacaacc ggaccgcgtc caaggttgat 180
gagacagttg aaagagcaaa acaagaagga aaccttcctg tgtatggcta ccatgaccct 240
aaattcttt 249

<210> 93

<211> 250

<212> DNA

<213> Glycine max

<400> 93

ccagatctca attttctgca atttcactca gaccaggacc ttaaccatgg ctcaacctgc 60
aagcctcaca agaataggcc ttgctggcct ggctgtgatg ggccaaaacc ttgctctcaa 120
cattgctgac aaaggctttc ccatttctgt ctacaaccgg accgcgtcca aggttgatga 180
gacagttgaa agagcaaaac aagaaggaaa ccttcctgtg tatggctacc ataacctcaa 240
attctttgtc 250

<210> 94

<211> 273

<212> DNA

<213> Glycine max

<400> 94

gttaatttgc acctttttgtt tctctctaga aattagaagt tcatgcttaa actttacctt 60
gatacttctt tctcgcatga attttcgaac attgaacagg aaattaacca tggctcaacc 120
tgcaagcctc acaagaatag gccttgctgg cctggctgtg atgggccaaa accttgctct 180
caacattgct gagaaaggct ttcccatttc tgtctacaac cggaccgcgt ccaagggtga 240
tgagacagtt gaaagagcaa aacaagaagg aaa 273

<210> 95

<211> 250

<212> DNA

<213> Glycine max

<400> 95

gttaatttgc acctttttgtt tctctctaga aattagaagt tcatgcttaa actttacctt 60
gatacttctt tctcgcatga attttcgaac attgaacagg aaattaacca tggctcaacc 120
tgcaagcctc acaagaatag gccttgctgg cctggctgtg atgggccaaa accttgctct 180
caacattgct gagaaaggct ttcccatttc tgtctacaac cggaccgcgt ccaagggtga 240
tgagacagtt 250

<210> 96

<211> 307

<212> DNA

<213> Glycine max

<400> 96

caacagtgca tgcttgcaat tcaacttagt ctacagtgtc cttgtatatt actcttttgt 60
ccttgctcac ttgatgcttt ctacaatctc tgggacaccc agatctcaat tttctgcaat 120
ttcactcaga ccaggaaatt aaccatggct caacctgcaa gcctcacaag aataggcctg 180
ctggcctggg ctgtgatggg ccaaaacctt gctctcaaca ttgctgagaa aggctttccc 240
atctcgtcta caaccggacc gcgtccaagg ttgatgagac agttgaaaga gcaaacaaga 300
aggaaact 307

<210> 97

<211> 241
 <212> DNA
 <213> Glycine max

<400> 97

ctaaaaagca cttcttagtt ctccctctcc cactaaaaac catagtactc tagataataa 60
 ttaacatcaa ccctcactcc ttcgcacacc aaacccttcc ttcttatctc tcactaatct 120
 aatggaatcc gcagcactgt cgcgcatagg cctggcgggc ctggcgggtga tgggccaaaa 180
 cctagcccta gacatcgag aaaaggggtt cccgatctcc gtgtacaacc gcacggcctc 240
 t 241

<210> 98
 <211> 401
 <212> DNA
 <213> Glycine max

<400> 98

gcgtccatac gactgagaga agacgacaga aggggatgtt aagaaggctc tttatgcagc 60
 caaaatctgt agttatgcac agggaatgaa tttgatccgt gcaaacagta ttgagcgggg 120
 ttgggatttg aagttgggtg aactggcccg gatttggaaa gggggttgca ttattagagc 180
 aatattctta gacagaatca agcaggcata tgaaagaaac cctaattctgg caaaccttct 240
 tgtggatcca gagtttgcac aggaaatcat tgattaccaa tctgcctgca ggagagttgt 300
 ttgccttgct atcaattctg gtattagcac tccaggatg tctgctaata ttgcttattt 360
 tgacacttac agaaaggaac agtttccagc caatttgggtg c 401

<210> 99
 <211> 435
 <212> DNA
 <213> Glycine max

<400> 99

cccacgcgtc cgtacggctg cgagaagacg acagaaggga gaaaaaattg gttgatgatg 60
 ttaggaaggc tctttatgca gccaaaatct gtagttatgc acagggaatg aatttgatcc 120
 gtgcaaagag tattgaaaag ggttgggatt tgaagttggg tgaactggcc cggatttgga 180
 aagggtggtt catcattaga gcaatattct tagacagaat caagcaagcg tatgatagaa 240

accctaatact ggcaaaccctt cttgtggatc cagagtttgc aaaggaaata atcgatcgcc 300
aatctgcctg gaggagagtt gtttgccttg ctatcaattc tggatatcagc actccaggta 360
tgtctgctag tcttgcttat tttgacactt acagaaggga aaggttgcca gctaatttgg 420
tgcaagctca acgag 435

<210> 100
<211> 376
<212> DNA
<213> Glycine max

<400> 100

cacgcgtcca tacggctgcg agaagacgac agaaggggat gttaggaagg ctctttatgc 60
agccaaaatc tgtagttatg cacagggaat gaatttgatc cgtgcaaaga gtattgaaaa 120
gggttgggat ttgaagttgg gtgaactggc ccggatttgg aaaggggggtt gcattattag 180
agcaatattc ttagacagaa tcaagcaggc atatgaaaga aaccctaatc tggcaaacct 240
tcttgtggat ccagagtttg caaaggaaat aattgattac caatctgcct ggaggagagt 300
tgtttgcctt gctatcaatt ctggtattag cactccaggt atgtctgcta gtcttgctta 360
gtttgacact tacaga 376

<210> 101
<211> 340
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 101

acgcgtccgc ccacgcgtcc gtacggctgc gagaagacga cagaaggggg atccgtgctc 60
tgtgattcca gaccttaatt tttctctcat tcgcttcaaa tttcnggaaa tcaattatgg 120
ctcaaccctc aacaagaata ggccttgctg gactggctgt tatgggcca aatctagcac 180
tcaatattgc tgagaaaggc tttcccatth ctgtttataa ccgaaccact tccaaggttg 240
atgagactgt agaacgagca aaacaagaag gaaatcttcc agtttatggc taccatgacc 300
ccgaagcttt tgttcattcc attcaaaaac ctaaggtgat 340

<210> 102
<211> 354

<212> DNA
<213> Glycine max

<400> 102

agtacggctg cgagaagacg acagaagggg ttgccagcta atttggtgca agctcaacga 60
gactactttg gtgctcatalc atatgaaagg gttgacatag aggggtctta ccatactgag 120
tggttcaagc ttgccaaaca gtctagaatt tagattactg tatttgaacc aatcaggatt 180
ttcctaataa atgtaatggt ttctgctcag actgtatgct gagttgagtt tacatagcca 240
caacgtgggtg aagttttatg tatattatgt ccaactgaat tgcattgatag ttgtttttcc 300
aactatgttg tatctttgct gattatgctt tgtgcttgat acaaaattgt ccca 354

<210> 103
<211> 399
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 103

aggctgctgag aagacgacag aaggggggtgc tctatgattc ccagacctta ttttttctgt 60
catttgcttc aaatttcagg gagattaatt atggctcaac ccacaacaag aataggcctt 120
gctggattgg ctgttatggg ccaaaatctg gcaactcaata ttgctgagaa aggctttccc 180
atttctgttt acaaccgaac cacttccaag gttgatgaga cagtagaacg agcaaaacaa 240
gaaggaaatc ttccagttaa tggctaccat gaccctgaag cttttgttca ttccattcaa 300
aagcctaagg tgataataat gcttggttaag gctggggcac ctgttgacca gaccattaag 360
aacctatctg cgtacatgga anaaagtgaac tgtataatt 399

<210> 104
<211> 179
<212> DNA
<213> Zea mays

<400> 104

gagctgtcgg tggccgctcc tacgatcgag gcgtccttgg actcgaggtt cctgagcggg 60
ctgaaggacg agcgggtgga tgcctccaag atcttccatg gtgactacta ctccaccggc 120
tcgccggtgg acaaggcgca ctggttgag gacgtgatgc aggcctgta cgcgtccaa 179

<210> 105
 <211> 270
 <212> DNA
 <213> Zea mays

 <400> 105

 tagcgcgacg gccgcccttt tttttttttt ttgagaatca tcatagcaat tgcataccaa 60
 aattaagaga atcaaactgt gcgtacctac atcacagtaa aactgaagct acacaatgtt 120
 cttcacttgc caaccataca gtacagcatt atttgaagta ctcgacttgg atctagaagc 180
 ataaagataa caatagtaaa acaaaagata acccacagag agacatcaca caaagcagac 240
 aacatcactt ctcataccaa ccaattcctc 270

<210> 106
 <211> 291
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <400> 106

 ccgcaacggn cncgtccttg atgcccggan gctcgttcga cgcttacaag tacgtcgaag 60
 acattgttct caaggtggct gctcaggtcc ctgacagtgg cccgtgtgtn acgtacattg 120
 gcaaagggtgg atcgggcaac tttgtcaaga tggttcacia cggaatcgag tatgggcgat 180
 atgcagctga tttccgaggc ttacgacgtt ctcaagtcgg tcggtaagct caccaacagt 240
 gagctgcacc aggtgttctc cgagtggaaac aagggcgagt cctgagttct t 291

<210> 107
 <211> 287
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <400> 107

 cgcagacgga ggacggcgcc tgcgtcacct tcgtcgggcc cggcggcgcc ggcaacttcg 60
 tcaagatggt gcacaacggg ancgagtacg gcgacatgca gcaccatcgc cgaggcgtac 120
 gacgtgctcc gcaggctcgg gggcctgtcc aactccgaga tcgccgatgt cttcgtctgag 180
 tggaacaggg gggagctcga gagcttctct gtcnagatca ccgccgacat tttcacctgt 240

atcgctcgtg ggaacgagtg gtacg

325

<210> 111
<211> 222
<212> DNA
<213> Zea mays

<400> 111

aaagggacag ggaagtggac ggtgcagcag gccgccgagc tgcggtggc cgctcctacg 60
atcgaagcgt tcttggaact gaggttctc agcgggctga aggacgagcg ggtggaggcc 120
tccaagatct tccaggtga ctactactcc accggctcgc cgttggaaca gccgcagctg 180
gtggaggacg tgaggcaggc cctgtacgcg tacaagatct gc 222

<210> 112
<211> 334
<212> DNA
<213> Zea mays

<400> 112

tgactactcc actggcctac cgttggaaca ggcacagctg atcgaggacg tgaggcaagc 60
tctatatgcc tccaagatct gcagttacgc gcagggcatg aacatcatca aggccaagag 120
ctcagagaaa gcatggggcc tcaaccttgg tgagctagcg aggatctgga agggaggggtg 180
catcatccgt gccatcttcc tcgaccgcg caagaaggcg tacgatagga accctaacct 240
tgccaacctc ctggttgacc ccgagttcgc ccaggagatc atagacaggc aagctgcctg 300
gcgcagggtt gtctgccttg ccatcaacaa tggc 334

<210> 113
<211> 314
<212> DNA
<213> Zea mays

<400> 113

gaggcctcca agatcttcca ggttgactac tactccaccg gctcgccggt ggacaaggcg 60
cactgagtgg aggacgtgag gcaggccctg tacgcgtcca agatctgcag ctacgcgcag 120
ggcatgaaca tcatcaaggc caagagcgcg gagaaaggct ggggcgtcga cctcggcgaa 180
ctggcacagg atctagaagg gcgggtgcat catccgcgcc atcttctctg accgcatcaa 240

gaaggcctac gacaggaacc cgggcctcgc cagcctgctc gtagaccccg agttcgcgca 300
 ggagatcatg gaca 314

<210> 114
 <211> 271
 <212> DNA
 <213> Zea mays

<400> 114

gaggcaagct ctatatgcct ccaagatctg cagttacgcg cagggcatga acatcatcaa 60
 ggccaagagc tcagagaaag gatggggcct caaccttggt gagctagcga ggatctggaa 120
 gggaggggtgc atcatccgtg ccattcttct cgaccgcata aagaaggcgt acgataggaa 180
 ccctaacctt gccaacctcc tcgttgacct cgagttcgcc caggagatca tagacaggca 240
 agctgcctgg cgcagggttg tctgccttgc c 271

<210> 115
 <211> 271
 <212> DNA
 <213> Zea mays

<400> 115

ctccactggc ctaccggtgg acaaggcaca gctgatcgag gacgtgaggc aagctctata 60
 tgcctccaag atctgcagtt acgcgcaggg catgaacata atcaaggcca agagctcaga 120
 gaaaggatgg ggctcaacc ttggtgagct agcgaggata tggaaggagg ggtgcatcat 180
 ccgtgccata ttctcgacc gcatcaagaa ggcgtacgat aggaacccta accttgccaa 240
 cctcctcggt gaccccgagt tcgcccagga g 271

<210> 116
 <211> 289
 <212> DNA
 <213> Zea mays

<400> 116

gaggacgtga ggcaagctct atatgcctcc aagatctgca gttacgcgca gggcatgaac 60
 atcatcaagg ccaagagctc agagaaagga tggggcctca accttgggtga gctagcgagg 120
 atctggaagg gaggggtgcat catccgtgcc atcttctctg accgcatcaa gaaggcgtac 180

gataggaacc ctaaccttgc caacctcctc gttgaccccg agttcgccca ggagatcata 240
gacaggcaag ctgcctggcg caggggtgtc tgccttgcca tcaacaatg 289

<210> 117
<211> 266
<212> DNA
<213> Zea mays

<400> 117

ctacgcgcag ggcataaaca tcatcaaggc caagagcgcg gagaaaggct gggggctcaa 60
cctcggcgag ctggccagga tctggaaggc cgggtgcatc atccgcgcca tcttcctgga 120
ccgcatcaag aaggcctacg acaggaaccc gggcctcgcc agcctgctcg tagaccccgga 180
gttcgcgcag gagatcatgg acaggcaggc ggcgtggcgc aggggtggtgt gcctcgccat 240
caacaacggc gtcagacccc gggaat 266

<210> 118
<211> 264
<212> DNA
<213> Zea mays

<400> 118

cgccacgccc cctgcctgtc catgatctcc tgcgcgaact cgggggtctac gagcaggctg 60
gcgaggcccc gggttcctgtc gtaggccttc ttgatgcggt ccaggaagat ggcgcggatg 120
atgcacccgc ccttccagat cctggccagc tgcgcgaggt tgagccccca gcctttctcc 180
gcgctcttgg ccttgatgat gttcatgccc tgcgcgtagt gcagatcttg gacgcgtaca 240
gggcctgcct cacgtcctcc acca 264

<210> 119
<211> 254
<212> DNA
<213> Zea mays

<400> 119

cggacgcgtg gcggaccgtg ggggacgtga ggcaagctct atatgcctcc aagatctgca 60
gttacgcgca aggcataaac agcatcaagg ccaagagctc agagaaagga tggggcctca 120
accttggtga gctagcgagg atctggaagg gaggggtgcat catccgtgcc atcttcctcg 180

accgcatcaa gaaggcgtag gataggaacc ctaaccttgc caacctcctc gttgaccccg 240
agttcgccca ggag 254

<210> 120
<211> 242
<212> DNA
<213> Zea mays

<400> 120

gcacgagctt ggactcgagg ttcttgagcg ggctgaagga cgagcgggtg gaggcctcca 60
agatcttcca gggtgactac tactccaccg gctcgccggt ggacaaggcg cactggtgga 120
ggacgtgagg caggccctgt acgcgtccaa gatctgcagc tacgcgcagg gcatgaacat 180
catcaaggcc aagagcgcgg agaaaggctg ggggctcaac ctcggcgagc tggccaggat 240
ct 242

<210> 121
<211> 225
<212> DNA
<213> Zea mays

<400> 121

acgcgtccaa gatctgcagc tacgcgcagg gcatgaacat catcaaggcc aagagcgcgg 60
agaaaggctg ggggctcaac ctcggcgagc tggccaggat ctggaagggc ggggtgcatca 120
tccgcgccat cttcctggac cgcataaaga aggcctacga caggaacccg ggcctcgcca 180
gcctgctcgt agaccccgag ttgcgcgagg agatcatgga caggc 225

<210> 122
<211> 220
<212> DNA
<213> Zea mays

<400> 122

acgcgtccaa gatctgcagc tacgcgcagg gcatgaacat catcaaggcc aagagcgcgg 60
agaaaggctg ggggctcaac ctcggcgagc tggccaggat ctggaagggc ggggtgcatca 120
tccgcgccat cttcctggac cgcataaaga aggcctacga caggaacccg ggcctcgcca 180
gcctgctcgt agaccccgag ttgcgcgagg agatcatgga 220

<210> 123
 <211> 248
 <212> DNA
 <213> Zea mays

 <400> 123

 gtgcatcatc cgtgccatct tctctgaccg catcaagaag gcgtacgata ggaaccctaa 60
 ccttgccaac ctctctgttg accccgagtt cgcccaggag atcatagaca ggcaagctgc 120
 ctggcgccagg gttgtctgcc ttgccatcaa caatggcggtt agcaccccag gcatgtctgc 180
 aagtctggcc tacttctgact cgtaccgaag agttaggttt cgcgaaactg tggtaggaggc 240
 tcagagag 248

<210> 124
 <211> 209
 <212> DNA
 <213> Zea mays

 <400> 124

 acgcgtccaa gatctgcagc tacgcgcagg gcatgaacat catcaaggcc aagagcgcg 60
 agaaaggctg ggggctcaac ctcggcgagc tggccaggat ctggaagggc gggtagcatca 120
 tccgcgccat cttcctggac cgcatacaaga aggcctacga caggaacccg ggcctcgcca 180
 gcctgctcgt agaccccag ttcgcgcag 209

<210> 125
 <211> 210
 <212> DNA
 <213> Zea mays

 <400> 125

 acgcgtccaa gatctgcagc tacgcgcagg gcatgaacat catcaaggcc aagagcgcg 60
 agaaaggctg ggggctcaac ctcggcgagc tggccaggat ctggaagggc gggtagcatca 120
 tccgcgccat cttcctggac cgcatacaaga aggcctacga caggaacccg ggcctcgcca 180
 gcctgctcgt agaccccag ttcgcgcag 210

<210> 126
 <211> 206
 <212> DNA

<213> Zea mays

<400> 126

acgcgtccaa gatctgcagc tacgcgcagg gcatgaacat catcaaggcc aagagcgcgg 60
agaaaggctg ggggctcaac ctgcgcgagc tggccaggat ctggaagggc ggggtgcatca 120
tccgcgccat ctctctggac cgcatacaaga aggcctacga caggaacccg ggctctgcca 180
gcctgctcgt agaccccgag ttgcgcg 206

<210> 127

<211> 176

<212> DNA

<213> Zea mays

<400> 127

gcgccatctt cctggaccgc atcaagaagg cctacgacag gaacccgggc ctgccagcc 60
tgctcgtaga ccccgagttc gcgcaggaga tcatggacag gcaggcagcg tggcgcaggg 120
tgggtgtgcct cgccatcaac aacggcgtca caccgccgga atgtccgcta gcctgg 176

<210> 128

<211> 146

<212> DNA

<213> Zea mays

<400> 128

cgtgaggcag gccctgtacg cgtccaagat ctgcagctac gcgcagggca tgaacatcat 60
caaggccaag agcgcggaga aaggctgggg gctcaacctc ggcgagctgg ccaggatctg 120
gaagggcggg tgcatacatcc gcgcca 146

<210> 129

<211> 187

<212> DNA

<213> Zea mays

<400> 129

tgggtggagga cgtgaggcag gccctgtacg cgtccaagat ctgcagctac gcgcagggca 60
tgaacatcat caaggccaag agcgcggaga aaggcttggg gctcggcctc ggcgagctgg 120
ccaggatctg gaagggcggg tgcatacatcc gcgccatctt cctggaccgc atcaagaatg 180

cctacga

187

<210> 130

<211> 123

<212> DNA

<213> Zea mays

<400> 130

gcctcaacct tggtagagcta gcgacgatct ggaaaggagg gtgcatcatc cgtgtaatct 60

tcctcgaccg catcaagaag gcgtacgata ggaaccctaa ccttgccaac ctctcgttg 120

acc 123

<210> 131

<211> 83

<212> DNA

<213> Zea mays

<400> 131

gtgcatcatc cgtgccatct tcctcgaacg catcgagaag gcgtacgata ggaaccctaa 60

ccttgccaac ctctcgttg acg 83

<210> 132

<211> 270

<212> DNA

<213> Zea mays

<400> 132

caggattctg gacaagactg ggatgaaggg gaccgggaaa tggaccgtgc agcaggcggc 60

ggacttgccg tggcagcgcc acgattgccg cgtcgctgga cgggaggtac ctctcagggt 120

tgaaggacga acgggtcgca gccgctgggg tgctggagga agaggggatg ccggcagcct 180

gttgagacg gttaatgtcg acaagaaggt gctggtggat acggtcaggc aagcgtctta 240

cgctccaag atttcagct atgcgcaggg 270

<210> 133

<211> 258

<212> DNA

<213> Zea mays

<400> 133

cggacgcgtg ggggaaccgt gcagcaggcg gcggacttgc ggtggcagcg cccacgattg 60
 ccgcgtcgca ggacgggagg tacctctcag ggttgaagga cgaacgggtc gcagccgctg 120
 ggggtgctgga ggaagagggg atgccggcag gcctgttga gacggttaat gtcgacaaga 180
 aggtgctggt ggataggggtc aggcaagcgc tctacgcctc caagatttgc agctatgcgc 240
 agggaatgaa tctgctgc 258

<210> 134
 <211> 119
 <212> DNA
 <213> Zea mays

<400> 134

atgcccgggtg ttgactactc cagtcggtaa tgagatttcc tgcaggaact tgtctattga 60
 tctttgtaag ttaattatit atataataa aataagagca aacatgcttg tgtttgggc 119

<210> 135
 <211> 87
 <212> DNA
 <213> Zea mays

<400> 135

atgcccgggtg ttgactactc cagtcggtaa tgagatttcc tgcaggaact tgtctattga 60
 tctttgtaag ttaattatit atataaa 87

<210> 136
 <211> 312
 <212> DNA
 <213> Zea mays

<400> 136

atgtcctgga caagaccggg atgaatggaa ctgggaaatg gacagtccag caggctgctg 60
 agctttctgt agctgtcct acaatcgagg cgtccttga ctccaggttc ctcagcggtc 120
 tgaaggacga gcgcgttgag gcttccaaaa tcttccaagg tgactactcc actggcctac 180
 cggtaggacaa ggcacagctg atcaggagcg tgaggcaagc tctatatgcc tccaagatct 240
 gcagttacgc gcagggcatg aacatcatca aggccaagag ctcagagaaa ggatggggcc 300
 tcaaccttgg tg 312

ggatgacaag ggtgaaggct acctggtcga caaggtcctg gacaagaccg ggatgaaggg 180
aactgggaaa tggacagtcc agcaggctgc tgagctttct gtagctgctc ctacaatcga 240
ggcgtccttg gactccaggt tcctcagcgg tctaaggacg agcgcgttga ggcttccana 300
atcttccaag gtgactactc cactgagcct acggtgngac aaggcacagc tgatcg 356

<210> 140
<211> 312
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 140

ctctgagtgg aacaaggggtg agctcctcag tttcttgatt gagatcacgg ccgacatctt 60
tggtatcaag gatgacaagg gtgaaggcta cctggtcgac aaggtcctgg acaagaccgg 120
gatgaaggga actgggnaat ggacagtcca gcaagctgct gaacttcctg tagctgctcc 180
tacaatcaag gcgtccttg actccaggtc cctcagcggg ctgaatgacg accgcgttga 240
ggcttccaaa atcttccaag gtgactactc cactggccta ccggtggaca aggcacagct 300
gatggaggac gt 312

<210> 141
<211> 275
<212> DNA
<213> Zea mays

<400> 141

gtggatcagg caactttgtc aagatggttc acaatgggat tgaatatggt gacatgcaac 60
ttatcgctga ggcttatgat gttctcaagt cgggtgggtaa gctaacaaac agcgagctgc 120
atcagggtgtt ctctgagtgg aacaaggggtg agctcctcag tttcttgatt gagatcacgg 180
ccgacatctt tggtatcaag gatgacaagg gtgaaggcta cctggtcgac aaggtcctgg 240
acaagaccgg gatgaaggga actgggaaat ggaca 275

<210> 142
<211> 268
<212> DNA
<213> Zea mays

<400> 142

tggttctccga gtggaacaag ggcgagctcc tgagcttctt gatcgagatc acggccgaca 60
tctttggcat caaggacgag catggcgatg gctacctggt ggataagggtc cttgacaaga 120
ccgggatgaa agggacaggg aagtggacgg tgcagcaggc cgccgagctg tcggtggccg 180
ctcctacgat cgaggcgctc ttggactcga ggttcctgag cgggctgaag gacgagcggg 240
tggaggcctc caagatcttc caggggtga 268

<210> 143
<211> 269
<212> DNA
<213> Zea mays

<400> 143

cgacgttctc aagtcgggtcg gtaagctcac caacagtgag ctgcaccagg tggttctccga 60
gtggaacaag ggcgagctcc tgagcttctt gatcgagatc acggccgaca tctttggcat 120
caaggacgag catggcgatg gctacctggt ggacaagggtc cttgacaaga ccgggatgaa 180
agggacaggg aagtggacgg tgcagcaggc cgccgagctg tcggtggccg ctcctacgat 240
cgaggcgctc ttggactcga ggttcctga 269

<210> 144
<211> 267
<212> DNA
<213> Zea mays

<400> 144

ggcaaagggtg gatcgggcaa ctttgtcaag atggttcaca acggaatcga gtatggcgat 60
atgcagctga tttccgaggc ttacgacgtt ctcaagtcgg tcggttaagct caccaacagt 120
gagctgcacc aggtgttctc cgagtggaaac aagggcgagc tcttgagctt cttgatcgag 180
atcacggccg acatctttgg catcaaggac gagcatggcg atggctacct agtggacaag 240
gtccttgaca agaccgggat gaaaggg 267

<210> 145
<211> 247
<212> DNA
<213> Zea mays

<400> 145

gagatcacgg ccgacatctt tggatatcaag gatgacaagg gtgaaggcta cctggtcgac 60
aaggtcctgg acaagaccgg gatgaaggga actgggaaat ggacagtcca gcaggctgct 120
gagctttctg tagctgctcc tacaatcgag gcgtccttgg actccagggt cctcagcggt 180
ctgaaggacg agcgcggtga ggcttccaaa atcttccaag gtgactactc cactggccta 240
ccggtgg 247

<210> 146
<211> 265
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<400> 146

cgtacnnttn gcanangtgg atcgggcaac tttgtcaaga tggtncaaca cggaatcgag 60
tatggcgata tgcagctgat ttccgangct tacgacgttc tcaagtcggt cggtaaagctc 120
accaacagtg agnngcacca nggtttctcc gantggaaca anggnnagct cctgngcttc 180
ttgatcgnga tnnccggccga natcnttggc atcaaggacg agcatggcga tggctaccta 240
ntggnaaagg tccntgacaa gaccg 265

<210> 147
<211> 216
<212> DNA
<213> Zea mays
<400> 147

gtccagcagg ctgctgagct ttctgtagct gtcctacaa tccaggcgtc cttggactcc 60
aggttcctca gcggtctgaa ggactagcgc gttgaggctt ccagaatctt ccaagggtgac 120
tactccactg gcctaccggt ggacaatgca cagctgatcg aggacgtgag gcaagctcta 180
tatgcctcca ggatctgcag ttacgcgcag ggcatg 216

<210> 148
<211> 256
<212> DNA
<213> Zea mays
<400> 148

caagggtgag ctctcagtt tcttgattga gatcacggcc gacatctttg gtatcaagga 60
 tgacaagggg gaaggctacc tggtcgacaa ggtcctggac aagaccggga tgaagggaac 120
 tgggaaatgg acagtccagc aggctgctga gctttctgta gctgctccta caatcgaggc 180
 gtccttggac tccaggttcc tcaccgtctt aaaggacgac cgcgttgagg cttccaaaat 240
 cttccaaggt ggatat 256

<210> 149
 <211> 176
 <212> DNA
 <213> Zea mays

<400> 149

aaacagcgag ctgcatcagg tggtctctga gtggaacaag ggtgagctcc tcagtttctt 60
 gattgagatc acggccgaca tctttggtat caaggatgac aagggggaag gctacctggt 120
 cgacaaggtc ctggacaagc cgggatgaag ggaactggga aatggacact ccaaca 176

<210> 150
 <211> 185
 <212> DNA
 <213> Zea mays

<400> 150

cgacgttctc aagtcggtcg gtaagctcac caacagtgag ctgcaccagg tggtctccga 60
 gtggaacaag ggcgagctcc tgagcttctt gatcgagatc acggccgaca tctttggcat 120
 caaggacgag catggcgatg gctacctggt ggacaaggtc cttgacaaga ccgggatgaa 180
 aggga 185

<210> 151
 <211> 136
 <212> DNA
 <213> Zea mays

<400> 151

caaacagcga gctgcatcag gtgttctctg agtggaaaca ggggcggctc ctcaagtttct 60
 tgattgagat cacggccgac atctttggta tcaaggatga caagggtgaa ggctacctgg 120
 tcgacaaggt cctgga 136

<210> 152
 <211> 282
 <212> DNA
 <213> Zea mays

 <400> 152

 cggcgctcac acgtacgaga gggacaggct tcccgccaac ctggtgcagg ctacagagaga 60
 ctacttcggc gctcacacgt acgagagggt tgacatgcct ggttctttcc acaccgagtg 120
 gttcaagatt gcgcgcaact ccaagatctg aacatggcct cgtgtttgca tatgccagta 180
 tgccaccgtg tcgagtaatc actcatatta ctgcttgag ggaggaactg tgtttgattt 240
 ttattttcca tgcgcaatgc ttaatttagg tcaggaagtc ca 282

<210> 153
 <211> 248
 <212> DNA
 <213> Zea mays

 <400> 153

 gcacgagcag ggataggctt cccgccaacc tgggtgcaggc tcagagagac tacttcggcg 60
 ctcacacgta cgagagggtt gacatgcctg gttctttcca caccgagtgg ttcaagattg 120
 gcgcgcaactc caagatctga acatggcctc gtgtttgcat atgccagtat gccaccgtgt 180
 cgagtaatca atcatattac tgcttgagc gaggaactgt gtttgatttt tattttccat 240
 ggcgcaatg 248

<210> 154
 <211> 254
 <212> DNA
 <213> Zea mays

 <400> 154

 gcgcgcaact ccaagatctg aacatggcct cgtgtttgca tatgccagta tgccaccgtg 60
 tcgagtaatc aatcatatta ctgcttgag ggaggaactg tgtttgattt ttattttcca 120
 tgcgcaatgc ttaatttagg tcaggaagtc caaagtctct cccattgttt tcctgtaaga 180
 gctaagcagt accagatgga gaaccttata tttgctggaa catgaataga agcatttgac 240
 atgcttgtgc ttac 254

<210> 155
 <211> 236
 <212> DNA
 <213> Zea mays

<400> 155

gcacgagatt gcgcgcaact ccaagatctg aacatggcct cgtgtttgca tatgccagta 60
 tgccaccgtg tcgagtaatc aatcatatta ctgcttgag ggaggaactg tgtttgattt 120
 ttattttcca tgcgcaatgc ttaatttagg tcaggaagtc caaagtctct cccattgttt 180
 tcctgtaaga gctaagcagt accagatgga gaaccttata tttgctggaa catgaa 236

<210> 156
 <211> 197
 <212> DNA
 <213> Zea mays

<400> 156

agacaggcaa gctgcctggc gcaggggtgt ctgccttgcc atcaacaatg gcgttagcac 60
 cccaggcatg tctgcaagtc tggcctactt cgactcgtac cgcagggaca ggcttcccgc 120
 caacctggtg caggctcaga gagactactt cggcgctccc acgtacgaga gggttgacat 180
 gcctggttct ttccaca 197

<210> 157
 <211> 281
 <212> DNA
 <213> Zea mays

<400> 157

cggacgcgtg ggcggacgcg tgggcggacg cgtgggggca agctgcctgg cgcaggggtg 60
 tctgccttgc cactcaacaa tggcagttac accccaggca tgtctgcaca gtctggccta 120
 cttcgactcg taccgcagga caggcttccc gccaacctgg tgcaggetca gagagactac 180
 ttcggcgctc acacgtacga gagggttgac atgcctgggt ctttccacac cgagtgggtc 240
 aagattgcgc gcaactccaa gatctgaaca tggcctcgtg t 281

<210> 158
 <211> 249
 <212> DNA

<213> Zea mays

<400> 158

cttgccatca acaatggcgt tacaccccag gcatgtctgc aagtctggcc tacttcgact 60
cgtaccgcag gacaggcttc ccgccaacct ggtgcaggct cagagagact acttcggcgc 120
tcacacgtac gagagggttg acatgcctgg ttctttccac accgagtggg tcaagattgc 180
gcgcaactcc aagatctgaa catggcctcg tgtttgcata tgccagtatg ccaccgtgtc 240
gagtaatca 249

<210> 159

<211> 150

<212> DNA

<213> Zea mays

<400> 159

gggaggaact gtgtttgatt tttattttcc atgcgcaatg cttaatttag gtcaggaagt 60
ccaaagtctc tccattgtt ttctgtgaag agctaagcag taccagatgg agaaccttat 120
atttgctgga acatgaataa aagcatttga 150

<210> 160

<211> 133

<212> DNA

<213> Zea mays

<400> 160

gtaagtctgg cctacttcga ctcgtaaccg agggacaggc ttcccgcgcaa cctgggtgcag 60
gctcagagag actacttcgg cgctcacacg tacgagaggg ttgacatgcc tggttctttc 120
cacaccgaat ggt 133

<210> 161

<211> 72

<212> DNA

<213> Zea mays

<400> 161

attgcgcgca actccaagat ctgaacatgg cctcgtgttt gcatatgcca gtatgccacc 60
gtgtcgagta at 72

<210> 162
 <211> 327
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 162

atcaggggga ctgtatcgtc gatggtggca acgagtggta cgagaacacg gagaggagg 60
 agaaggcgat ggaggagcgc gggctcctat atcttggcat gggcgtctcc ggaggagagg 120
 aggggtgccc caatggcccgc tccttgatgc ccgggggctc cttcgaggca tacaagtaca 180
 ttgaagatat tcttctcaag gtggctgctc aggtacctga cagcggcccgc tgcgtcacat 240
 atattggcaa aagtggatca ggcaacttcg tcaagatggg tcacaatgga attgaatatg 300
 gtgacatgcn acttatcgcc gaggctt 327

<210> 163
 <211> 331
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 163

cgagtgggtac gagaacacgg agaggangga gaaggcgatg gaggagcgcg ggctcctata 60
 tcttggcatg ggcgtctccg gaggagagga nggtgcccgc aatggcccgt ccttgatgcc 120
 cgggggctcc ttcgaggcat acaagtacat tgaagatatt cttctcaagg tggctgctca 180
 ggtacctgac agcggcccgt gcgtcacata tattggcaaa ggtggatcag gcaactttgt 240
 caagatgggt cacaatggga ttgaatatgg tgacatgcaa cttatcgctg aggcttatga 300
 tgttctcaag tcggtgggta actaacaac a 331

<210> 164
 <211> 297
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 164

cacggagagg agggagaagg ccatggagga gcgcggcctc ctgtatcttg gcatgggtgt 60
 ctctggagga gagganggtg cccgcaacgg cccgtccttg atgcccgag gctcgttcga 120

ggcttacaag tacgtcgaag acattgtcct caaggtggct gctcaggtcc ctgacagtgg 180
 cccgtgtgtc acgtacattg gcaaaggtgg atcgggcaac tttgtcaaga tggttcacia 240
 cggaatcgag tatggcgata tgcagctgat ttccgaggca tacgacgttc tcaagtc 297

<210> 165
 <211> 324
 <212> DNA
 <213> Zea mays

<400> 165

ggtggccgga cgggtggtggc atcgccaatt caactccgca tctgaatcgg cactcggcag 60
 cgcgccagtc catagtgtag gaggaggaga tggcgctcac aagaatcggc cttgctggcc 120
 ttgcggtcat ggggcagAAC ccttgccctca agcattgcag agaaagggtt ccccatctct 180
 gtgtacaaca ggacaacctc caaggtggac gagaccgtgc agcgtgccaa ggcagaagga 240
 aaccttcccg tctacggctt ccatgacccc gcgtcctttg tgaactccat tcagaagcca 300
 cgggtggtga tcatgctcgt caag 324

<210> 166
 <211> 287
 <212> DNA
 <213> Zea mays

<400> 166

gccacgggtg gtgatcatgc tcgtcaaggc cggcgacaca gttgtgcaga ccatcgcgac 60
 gctcgcagct cacttggagc agggcgactg cgtcatcgat ggggggaacg agtggtacga 120
 gaacacggag aggagggaga aggccatgga ggagcgcggc ctctgtatc ttggcatggg 180
 tgtctctgga ggagaggagg gtgcccgaac cggcccgtcc ttgatgcccg gaggtcgtt 240
 cgaggcttac aagtacgtc aagacattgt cctcaagggtg gctgctc 287

<210> 167
 <211> 283
 <212> DNA
 <213> Zea mays

<400> 167

ccgcatctga atcggcactc ggcagcgcgc cactccatag tgtaggagga gatggcgctc 60

acaagaatcg gtcttgctgg ccttgcggtc atggggcaga accttgcctt caacattgca 120
gagaaaggggt tccccatctc tgtgtacaac aggacaacct ccaagggtga cgagaccgtg 180
cagcgtgcca aggcagaagg aaaccttccc gtctacggtt tccatgacct cgcgctcttt 240
gtgaagtcca ttcagaagcc acgggtggtg atcatgctcg tca 283

<210> 168
<211> 285
<212> DNA
<213> Zea mays

<400> 168

ggtggacgag accgtgcagc gtgccaaggc agaaggaaac cttcccgctt acggcttcca 60
tgaccccgcg tcctttgtga agtccattca gaagccacgg gtggtgatca tgctcgtaa 120
ggccggcgcg ccagttgacc agaccatcgc gacgctcgca gtcacttgg agcagggcga 180
ctgcatcatc gatgggggga acgagtggta cgagaacacg gagatgaggg agaaggccat 240
ggaggatcgc ggcctcctgt atcttggcat ggggtgtctct ggagg 285

<210> 169
<211> 311
<212> DNA
<213> Zea mays

<400> 169

gccggagggtg gtggcatcgc aattcaactc cgcactctgaa tcggcactcg gcagcgcgcc 60
actccatagt gtaggaggag gagatggcgc tcacaagaat cggtcttgct ggccttgccg 120
tcatggggca gaaccttgcc ctcaacattg cagagaaagg gttccccatc tctgtgtaca 180
acaggacaac ctccaagggtg gacgagaccg tgcagcgtgc caaggcagaa ggaaaccttc 240
ccgtctacgg cttccatgac cccgcgtcct ttgtgaactc cattcagaag ccacgggtgg 300
tgatcatgct c 311

<210> 170
<211> 290
<212> DNA
<213> Zea mays

<400> 170

aattcaactc cgcatctgaa tcggcactcg gcagcgcgcc agctccatag cgaggagatg 60
 gcgctcacia gaatcgggtct tgctggcctt gcggtcatgg ggcagaacct tgccctcaac 120
 attgcagaga taggggttccc catctctgtg tacaacagga caacctccaa ggtggacgag 180
 accgtgcagc gtgccaaggc agaaggaaac cttcccgtct acgggttcca tgacccccgcg 240
 tcctttgtga agtccattca gaagccacgg gtggtgatca tgctcgtcaa 290

<210> 171
 <211> 275
 <212> DNA
 <213> Zea mays

<400> 171

gccacgggtg gtgatcatgc tcgtcaaggc cggcgcgccca gttgaccaga ccatcgcgac 60
 gctcgcagct cacttggagc agggcgactg catcatcgat ggggggaacg agtggtagca 120
 gaacacggag aggagggaga aggccatgga ggagcgcggc ctcttgtatc ttggcatggg 180
 tgtctctgga ggagaggagg gtgcccgaac cggcccgtcc ttgatgcccg gatgctcgtt 240
 cgacgcttac aagtacgtcg aagacattgt tctca 275

<210> 172
 <211> 296
 <212> DNA
 <213> Zea mays

<400> 172

gagaggtagg tggccggacg gtggtggcat cgccaattca actccgcata tgaatcggca 60
 ctccgcagcg cgccactcca tagtgtagga ggaggagatg gcgctcacia gaatcgggtct 120
 tgctggcctt gcggtcatgg ggcagaacct tgccctcaac attgcagaga aagggttccc 180
 catctctgtg tacaacagga caacctccaa ggtggacgag accgtgcagc gtgccaaggc 240
 agaaggaaac cttcccgtct acgggttcca tgacccccgcg tcctttgtga actcca 296

<210> 173
 <211> 268
 <212> DNA
 <213> Zea mays

<400> 173

gcgactgcat catcgatggg gggaacgagt ggtacgagaa cacggagagg agggagaagg 60
ccatggagga gcgcggcctc ttgtatcttg gcatgggtgt ctctggagga gaggaggggtg 120
cccgcaacgg cccgtccttg atgcccgag gctcgttcga cgcttacaag tacgtcgaag 180
acattgttct caaggtggct gtcagggtcc ctgacagtgg cccgtgtgtc acgtacattg 240
gcaaagggtg atcgggcaac tttgtcaa 268

<210> 174
<211> 276
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<400> 174

acaagtacat tgaagatatt cttctcaagg tggctgctca ggtacctgac agcggcccgt 60
gcgtcacata tattggcaaa ggtggatcag gcaacttcgt caagatgggt cacaatggaa 120
ttgaatatgg tgacatgcaa cttatcgccg aggcttatga tgttctcaag ttcgggtgggt 180
aagctcacia acngcgagct gcatcagggtg ttctctgagt ggaacaaggg tgagctcctc 240
agtttcttga ttgagatcac ggccgacatc ttggta 276

<210> 175
<211> 297
<212> DNA
<213> Zea mays
<400> 175

gtaggtggcc ggacggtggt gggctcgcca attcaactcc gcatctgaat cggcactcgg 60
cagcgcgcca gctccatagt gtaggaggag gtgatggcgc tcacaagaat cgggtcttgct 120
ggccttgccg tcatggggca gaaccttgcc ctcaacattg cagagaaagg gttccccatc 180
tctgtgtaca acaggacaac ctccaagggtg gacgagaccg tgcagcgtgc caaggcagaa 240
ggaaaccttc ccgtctacgg cttccatgac cccgcgtcct ttgtgaactc cattcag 297

<210> 176
<211> 274
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 176

acaagtacat tgaagatatt cttctcaagg tggctgctca ggtacctgac agcggcccggt 60
gcgtcacata tattggcaaa ggtggatcag gcaacttcgt caagatggtt cacaatggaa 120
ttgaatatgg tgacatgcaa cttatcgccg aggcttatga tgttctcaag tccgggtgggt 180
aagctcacia acngcgagct gcatcaggtg ttctctgagt ggaacaaggg tgagctcctc 240
agtttctgat tgagatcacg gccgacatct tgggt 274

<210> 177
<211> 274
<212> DNA
<213> Zea mays

<400> 177

ggtggccgga cgggtggtggc atcgccaatt caactccgca tctgaatcgg cactcggcag 60
cgcgccactc catagtgtag gaggagatgg cgctcacaag aatcggtctt gctggccttg 120
cggtcatggg gcagaacctt gccctcaaca ttgcagagaa agggttcccc atctctgtgt 180
acaacaggac aacctccaag gtggacgaga ccgtgcagcg tgccaaggca gaaggaaacc 240
ttcccgcteta cggttccat gaccccgcggt cctt 274

<210> 178
<211> 271
<212> DNA
<213> Zea mays

<400> 178

cgggtggccgg acggtggtgg catcgccaat tcaactccgc atctgaatcg gcaactcggca 60
gcgcgccact ccatagtgtg ggaggaggag atggcgctca caagaatcgg tcttgctggc 120
cttgcggtca tggggcagaa ccttgccctc aacattgcag agaaagggtt ccccatctct 180
gtgtacaaca ggacaacctc caaggtggac gagaccgtgc agcgtgccaa ggcagaagga 240
aaccttcccg tctacggctt ccatgacccc g 271

<210> 179
<211> 258
<212> DNA
<213> Zea mays

<400> 179

gggttcccca tctctgtgta caacaggaca acctccaagg tggacgagac cgtgcagcgt 60
gccaaggcag aaggaaacct tcccgctctac ggcttccatg accccgcgtc ctttgtgaac 120
tccattcaga agccacgggt ggtgatcatg ctctgcaagg ccggcgcgcc agttgaccag 180
atcatcgcga cgctcgcagc tcaattggag cagggcgact gcatcatcga tggggggaac 240
gagtgggtacg agaacacg 258

<210> 180

<211> 270

<212> DNA

<213> Zea mays

<400> 180

ggccggcgcg ccagttgacc agaccatcgc gacgctcgca gctcacttgg agcagggcga 60
ctgcatcatc gatgggggga acgagtggta cgagaacacg gagaggaggg agaaggccat 120
ggaggagcgc ggctcttgt atcttggcat ggggtgtctct ggaggagagg aggggtgcccg 180
caacggccccg tccttgatgc ccggagggtcg ttcgacgctt acaagtacgt cgagacattg 240
ttctcaaggt ggctgctcag gtccctgaca 270

<210> 181

<211> 251

<212> DNA

<213> Zea mays

<400> 181

gtgatcatgc tcgtcaaggc cggcgcgcca gtagaccaga ccatcgcgac gctcgcagct 60
cacttggagc agggcgactg catcatcgat ggggggaacg agtggtagca gaacacggag 120
aggagggaga aggccatgga ggagcgcggc ctcttgtatc ttggcatggg tgtctcttga 180
ggagaagaag gtgcccgcga cggcccgtcc ttgatgcccg ggagctcggt cgacgcttac 240
aagtacgtcg a 251

<210> 182

<211> 224

<212> DNA

<213> Zea mays

<400> 182

gccggaggtg gtggcatcgc caattcaact ccgcatctga atcggcactc ggcagcgcgc 60
cagctccata gtgtaggagg agatggcgct cacaagaatc ggtcttgctg gccttgcggt 120
catggggcag aaccttgccc tcaacattgc agagaaaggg ttccccatct ctgtgtacaa 180
caggacaacc tccaaggtgg acgagaccgt gcagcgtgcc aagg 224

<210> 183

<211> 233

<212> DNA

<213> Zea mays

<400> 183

gccggaggtg gtggcatcgc caattcaact ccgcatctga atcggcactc ggcagcgcgc 60
cactccatag tgtaggagga ggagatggcg ctcaacaaga tcggtcttgct tggccttgcg 120
gtcatggggc agaaccttgc cctcaacatt gcagagaaag ggttccccat ctctgtgtac 180
aacaggacaa cctccaaggt ggacgagacc gtgcagcgtg ccaaggcaga agg 233

<210> 184

<211> 235

<212> DNA

<213> Zea mays

<400> 184

ggccggacgg tgggtggcatc gccaatcaaa ctccgcatct gaatcggcac tcggcagcgc 60
gccagtccat agtgtatgag gagatggcgct tcacaagaat cgggtcttgct ggccttgcg 120
tcatggggca gaaccttgcc ctcaacattg cagagaaagg gttccccatc tctgtgtaca 180
acaggacaac ctccaaggtg gacgagaccg tggcacgtgc caaggcagaa ggaaa 235

<210> 185

<211> 263

<212> DNA

<213> Zea mays

<400> 185

cttccctgcc cgattggcga tttaagtggg gggggaggga aggacgatgg tcagtgaag 60
agaggtaggt ggccggacgg tgggtggcatc gccaatcaaa ctccgcatct gaatcggcac 120

tcggcagcgc gccagctcca tagtgtagga ggagatggcg ctcacaagaa tcggtcttgc 180
 tggccttgcg gttatggggc agaaccttgc cctcaacatt gcagagaaag ggttcccat 240
 ctctgtgtac aacaggacaa cct 263

<210> 186
 <211> 221
 <212> DNA
 <213> Zea mays

<400> 186

ggccggacgg tgggtggcatc gccaatcaaa ctccgcatct gaatcggcac tcggcagcgc 60
 gccagctcca taggaggagg agatggcgct cacaagaatc ggtcttgctg gccttgcggt 120
 catggggcag aaccttgccc tcaacattgc agagaaaggg ttcccatct ctgtgtacaa 180
 caggacaacc tccaagggtg acgagaccgt gcaagggtgcc a 221

<210> 187
 <211> 294
 <212> DNA
 <213> Zea mays

<400> 187

cccgaaagcc gccaaagcgc tgctgcgcaa ggagcgaaag gcaattccct acccgattgg 60
 cgatttaagt ggtgggggag ggaaggccga tggtcagtga aagagaggta ggtggccgga 120
 cggagggtggc atcgccaatt caactccgca tctgaatcgg cactcggcag cgcgccagca 180
 ccataggagg agatggcgct cacaagaatc ggtcttgctg gccttgcggt catggggcag 240
 aaccttgccc tcaacattgc agagaaaggg ttcccatct ctgtgtacaa cagg 294

<210> 188
 <211> 200
 <212> DNA
 <213> Zea mays

<400> 188

ggccggacgg tgggtggcatc gccaatcaaa ctccgcatct gaatcggcac tcggcagcgc 60
 gccagctcca taggaggagg agatggcgct cacaagaatc ggtcttgctg gccttgcggt 120
 catgtggcag aaccttgccc tcaacattgc agagaaaggg ttcccatct ctgtgtacaa 180

caggacaacc tccaaggtgg

200

<210> 189
<211> 154
<212> DNA
<213> Zea mays

<400> 189

ctccgcatct gcatcggcag cgcgccagct ccataggagg agatggcgct cacaagaatc 60

ggtcttgctg gccttgcggt catggggcag aaccttgccc tcaacattgc agagaaagg 120

ttccccatct ctgtgtacaa caggacaacc tcca 154

<210> 190
<211> 127
<212> DNA
<213> Zea mays

<400> 190

ggtaggtggc cggacggtgg tggcatcgcc agttcaactc cgcattctgaa tcggcactcg 60

gcagcgcgcc actccatagg aggagatggc gctcacaaga atcgggtcttg ctggccttgc 120

ggtcatg 127

<210> 191
<211> 104
<212> DNA
<213> Zea mays

<400> 191

gcgggacggt ggtggcatcg ccaattcaac tccgcatctg aatcggcact cggcagcgcg 60

ccagctccat agtgtaggag gagatggcgc tcacaagaat cggt 104

<210> 192
<211> 162
<212> DNA
<213> Zea mays

<400> 192

ggcaccttcc ctgcccatt ggcgatttaa gtggtggggg aggggaaggcc gatggtcagt 60

gaaagagagg taggtggccg gacggtggtg gcatcgccaa ttcaactccg catctgaatc 120

ggcactcggc agcgcgccag ctccatagtg atagaggagg ag

162

<210> 193
<211> 87
<212> DNA
<213> Zea mays

<400> 193

gcatacaagt acattgaaga tattcttctc aaggtggctg ctcaggtacc tgacagcggc 60

cgtgcgtcac atatatggca aggtgga 87

<210> 194
<211> 91
<212> DNA
<213> Zea mays

<400> 194

cgggtggctg ctcaggtacc tgaccgcggc ccgtgcgtca catatattgg caaaggtgcc 60

tcaggcaact tcgtcaagat ggttcacaat c 91

<210> 195
<211> 330
<212> DNA
<213> Zea mays

<400> 195

ccgcgctgca ggggcgacgc aaggccgagc gctcctcgat ccagatccaa ggtaggagat 60

ggctctcacg agaattggcc tcgccggcct cgcggtcatt ggacagaacc ttgccctcaa 120

catcgcggag aaagggttcc ccatctcggt ctacaacagg acaacctcca aggttgatga 180

gaccgtgcag cgtgccaaagg tcgaaggaaa cctcccagtg tttggtttcc acgaccccg 240

gtccttcgtg agtccatcc agaagccccg tgcgtcatc atgctcgtca aggctggggc 300

gccggtggac cagaccattg ccacgctcgc 330

<210> 196
<211> 323
<212> DNA
<213> Zea mays

<400> 196

tccagatcca aggtaggaga tggctctcac gagaattggc ctcgccggcc tcgcggtcat 60
 gggacagaac cttgccctca acatcgcgga gaaagggttc cccatctcgg tctacaacag 120
 gacaacctcc aaggttgatg agaccgtgca gcggtgccaag gtcgaaggaa acctcccagt 180
 gtttggtttc caccgacccg cgtccttcgt gagtccatc cagaagcccc gtgtcgtcat 240
 catgctcgtc aaggctgggg cgccggtgga ccagaccatt gccacgctcg cggcgcacct 300
 tgatcagggg gactgtatcg tcg 323

<210> 197
 <211> 350
 <212> DNA
 <213> Zea mays

<400> 197

agcgtgccaa ggtcgaagga aacctcccag tgtttggttt ccacgacccc gcgtccttcg 60
 tgagctccat ccagaagccc cgtgtcgtca tcatgctcgt caaggctggg gcgccggtgg 120
 accagaccat tgccacgctc gcggcgcacc ttgatcaggg ggactgtatc gtcgatgggtg 180
 gcaacagtgg tacgagaaca cggagaagag ggagaaggcg atggaagagc gcgggctcct 240
 atatcttggc atgggcgtct ccggaggaga ggacggtgcc cgcaatggct cgtccttgat 300
 gcccgggggc tccttcgagg catacaagta cattgaagat attcttctca 350

<210> 198
 <211> 317
 <212> DNA
 <213> Zea mays

<400> 198

gcaaggccga gcgtcctcgt atccagatcc aaggtaggag atggctctca cgagaattgg 60
 cctcgccggc ctcgcggtca tgggacagaa ccttgccctc aacatcgcg agaaagggtt 120
 cccatctcgt gtctacaaca ggacaacctc caaggttgat gagaccgtgc agcgtgccaa 180
 ggtcgaagga aacctcccag tgtttggttt ccacgacccc gcgtccttcg tgagctccat 240
 ccagaagccc cgtgtcgtca tcatgctcgt caaagctggg gcgccggtgg accagaccat 300
 tgccacgctc gcggcgc 317

<210> 199
 <211> 299
 <212> DNA
 <213> Zea mays

<400> 199

ctctcgctc ggcttggcag tcggcactcc ctctccaccg cgctgcaggg gcgacgcaag 60
 gccgagcgct cctcgatcca gatccaaggt aggagatggc tctcacgaga attggcctcg 120
 ccggcctcgc ggtcatggga cagaaccttg ccctcaacat cgcgagagaaa gggttcccca 180
 tctcgggtcta caacaggaca acctccaagg ttgatgagac cgtgcagcgt gccaaaggtcg 240
 aaggaaacct cacagtgttt ggtttccacg accccgcgtc cttcgtgagc tccatccag 299

<210> 200
 <211> 279
 <212> DNA
 <213> Zea mays

<400> 200

tgtcggcact ccctctccac cgcgctgcag gggcgacgca aggccgagcg ctctcgatc 60
 cagatccaag gtaggagatg gctctcacga gaattggcct cgccggcctc gcggtcatgg 120
 gacagaacct tgccctcaac atcgcgagaga aagggttccc catctcgggtc tacaacagga 180
 caacctccaa ggttgatgag accgtgcagc gtgccaaggt cgaaggaaac ctcccagtg 240
 ttggtttcca cgaccccgcg tccttcgtga gtcctatcc 279

<210> 201
 <211> 321
 <212> DNA
 <213> Zea mays

<400> 201

gtaggctggc gctgcagatc aaaaggtctt cgctcgggt tggcagtcgg cactccctct 60
 ccaccgcgt gcaggggcca cgcaaggccg agcggctctc gatccaggtc caaggtagga 120
 gatggctctc acgaggaatg gcctcgccgg cctcgggtc atgggacaga accttgcct 180
 caacatcgcg gagaaagggt tccccatctc ggtctacaac aggacaacct ccaaggttga 240
 tgagaccgtg cagcgtgcca aggtcgaaag aaacctccca gtgtttggtt tccacgacct 300
 cgcgtccttc gtgagctcca t 321

<210> 202
 <211> 267
 <212> DNA
 <213> Zea mays

<400> 202

cccatctcgg tctacaacag gacgacctcc aaggttgatg agaccgtgca gcgtgccaaag 60
 gtcgaaggaa acctccccgt gtttgggtctc cacgacccccg cgtccttcgt gagtccatc 120
 cagaagcccc gtgtcgtcat catgctcgtc aaggctgggg cgccggtgga ccagaccatt 180
 gccacgctcg cggcgcacct ggatcagggg gactgtatcg tcgatgggtg caacgagtgg 240
 tacgagaaca cggagaggaa ggagaag 267

<210> 203
 <211> 266
 <212> DNA
 <213> Zea mays

<400> 203

gctgcagatc aaaaggctct cgcctcggct tggcagtcgg cactccctct ccaccgcgct 60
 gcaggggcca cgcaaggccg agcgtcctc gatccagatc caaggtagga gatgtgtctc 120
 acgagaattg gcctcgccgg cctcgcggtc atgggacaga accttgcct caacatcgcg 180
 gagaaagggg tccccatctc ggtctacaac aggacgacct ccaagggttg gaagaccgtg 240
 cagcgtgcca aggtcgaagg aaacct 266

<210> 204
 <211> 264
 <212> DNA
 <213> Zea mays

<400> 204

cgctgcagat caaaaggctc tcgcctcggc ttggcagtcg gcactccctc tccaccgcgc 60
 tgcaggggcg acgcaaggcc gagcgtcctc cgatccagat ccaaggtagg agatggctct 120
 cacgagaatt ggctcgccg gcctcgcggt catgggacag aaccttgccc tcaacatcgc 180
 ggagaaaggg ttccccatct cgggtctaaa caggacaacc tccaagggtg atgagaccgt 240
 gcagcgtgcc aaggtcgaag gaaa 264

<210> 205
 <211> 294
 <212> DNA
 <213> Zea mays

<400> 205

aacgtaggct ggcgctgcag atcaaaaggc tctcgctcgc gcttggcagt cggcaactccc 60
 tctccaccgc gctgcagggg cgacgcaagg ccgagcgctc ctcgatccag atccaaggta 120
 ggagatggct ctcacgagaa tgcgcctcgc cggcctcgcg gtcatgggac agaaccttgc 180
 cctcaacatc gcggagaaaag ggttccccat ctcggtctac aacaggacaa cctccaaggt 240
 tgatgagacc gtgcagcgtg ccaaggctga aggaaacctc ccagtgtttg gttt 294

<210> 206
 <211> 150
 <212> DNA
 <213> Zea mays

<400> 206

cagaactccg tgctcgtcata tgctcgtcaa ggctggggcg ccggtggacc agaccattgc 60
 cacgctcgcg gcgcaccttg atcaggggga ctgtatcgtc gatggtggca acgagtggta 120
 cgagaacacg gagaggaggg agaaggcgat 150

<210> 207
 <211> 161
 <212> DNA
 <213> Zea mays

<400> 207

caaaaggctc tcgcctcggc ttggcagtcg gcactccctc tccaccgcgc tgcaggggcg 60
 acgcaaggcc gagcgctcct cgatccagat ccaaggtagg agatggctct cacgagaatt 120
 ggctcgcgcg gcctcgcggt catgggacag aaccttgccc t 161

<210> 208
 <211> 161
 <212> DNA
 <213> Zea mays

<400> 208

caaaaggctc tcgcctcggc ttggcagtcg gcactccctc tccaccgcgc tgcaggggcg 60
acgcaaggcc gagcgctcct cgatccagat ccaaggtagg agatggctct caccagaatt 120
ggcctcgccg gcatcgcggt catgggacag aaccttgccc t 161

<210> 209
<211> 205
<212> DNA
<213> Zea mays

<400> 209

accttgccct caacatcgcg gagaaagggt tccccatctc ggtctacaac aggacgacct 60
ccaagggtga tgagaccgtg cagcgtgcc aagtcgaagg aaacctcccc gtgtttggtt 120
tccacgaccc cgcgtccttc gtgagctccc atccagaagc cccgtgtcgt catcatgctc 180
gtcaaggctg gggcgccggt ggacc 205

<210> 210
<211> 270
<212> DNA
<213> Glycine max

<400> 210

ggccggcgcc cccgtcgacc aaaccatcgc cgccctctcc gaccacctcg accccggcga 60
ctgcatcatc gacggcgcca acgagtggta cgagaacacc gagcgccgca tgagcctcgt 120
cgccgacaaa ggccctcctc acctcggcac gggcgtctcc ggcggcgaag acggcgcacg 180
ccacggcccc tccctcatgc ccggtgggtc ccaccaggcc tactccaacg tccaggacat 240
cctccacaaa atcgccgccc aggtcgacga 270

<210> 211
<211> 165
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 211

angagtgnnt acgagaacac cgagcgccgc atgaacctcg tcgccgacaa aggcctctc 60
tanctcggca tgggcgtctc cggcggcgaa gacggcgcac gccacggccc ctccctcatg 120

cccgggtgggt cccaccatgc ctactccaac gtgccagnac atcct 165

<210> 212
<211> 248
<212> DNA
<213> Glycine max

<400> 212

ggcgtatgca agggaaatgg tgtatagaca ggctgcgtgg catagaatcg tggggttggc 60
ggtttcggct gggattagta ctagcgggaat gtgtgccagt cttgcttggt ttgataccta 120
tcggagggca agacttccgg caaaccttgt ccaggctcag agggacttgt ttggggcgca 180
tacttacgag agggttgatc gccctggggc tttcatacc gagtggacga aactcgctcg 240
caatagtg 248

<210> 213
<211> 251
<212> DNA
<213> Glycine max

<400> 213

ggagtttgca agggaaatgg tgcagagaca ggctgcgtgg atgagggttg tggggttggc 60
ggtttcggct gggattagta ctcccgaat gtgtgccagt cttgcttact ttgataccta 120
tcggagggca agacttccgg caaaccttgt ccaggctcag agggacttgt ttggggcgca 180
tacttacgag agggttgatc gccctggggc tttcatacc gagtggacga aactcgctcg 240
caatagtggg g 251

<210> 214
<211> 272
<212> DNA
<213> Glycine max

<400> 214

gataagaagc agttgatcga tgacgtcagg caggctctga atgcttccaa gattagcagt 60
tatgctcagg ggatgaattt gttgagggct aagagtaatg agaaaggatg gaacttgaat 120
ttgggggagt tagctaggat tggaaggag ggtgcatcat aagggccgtg ttcttgacc 180
ggatcaagaa ggcttatcag aggaacccta atttggcgag tttgattgtg gaccggagt 240

atgcaaggcg aatagtccag agacacgctg cg

272

<210> 215

<211> 196

<212> DNA

<213> Zea mays

<400> 215

gccacgcgtc cgcgagcgcg tggattccat gtgagggcat cagctcgggt tgacaaattc 60

tcaaagagt acatcatcgt gtccccttcg attctgtctg caaactttgc gaagcttggt 120

gatcaggtaa aagctgtgga ggtggcagga tgcgactgga ttcattgtcga tgcattggac 180

ggcgctttg tgccaa 196

<210> 216

<211> 353

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 216

tgcgtcatct acgcgcagga aggcgttcca agtgagggca tcagctcggg ttgacaagtt 60

ctcaaagagt gatatacaggg tngtcccttc gcatctgtct ggaaactgtc gcaaagctat 120

gttgatcagg tagaagcgtg ggagggtggca agatgtgact ggattctgtc gatgtcatgg 180

acgggcgctg tgtgcgaaat atcacaattg gacctgtggt tgttgatgct ctgcgtcctg 240

tgactgatct tccattggat gtacatctga tgattgtgga acctgagcag cgagtcactg 300

attgtatcaa ggcangtgct gatattgtta gtgtccactg tgaacagaca tcg 353

<210> 217

<211> 312

<212> DNA

<213> Zea mays

<400> 217

agcgactcca ctactgcaa ttgattatgt tcttgatgtt gttgacctgg tgctgattat 60

gtctgtgaat cctggggttg gtggccagag ctttatcgag agtcaagtaa agaaaattgc 120

agaactgaga aggttatgtg cagagaaggg agtgaacccc tggattgagg ttgatgggtg 180

tgttggtccg aaaaatgcct acaaggttat tgaagctggc gcaaagcca ttgtcgcagg 240

ttctgcagtt tttggggctc cagactacgc tgaagctatc aaaggaataa agaccagcca 300
aagacctcta gc 312

<210> 218
<211> 312
<212> DNA
<213> Zea mays

<400> 218

gctctgcgctc cagtgactga tcttccggtg gatgtacatc tgatgattgt ggaacctgag 60
cagcgagtcc ccgattttat caaggcaggt gctgatattg ttagtgtcca ctgtgaacag 120
acatcgacca tccatttgca ccgaacagtc aatcagatta aaagtctagg agcaaaggca 180
ggagttgttt tgaatccagc gactccactc actgcaattg attatgttct tgatgttggt 240
gacctggtgc tgattatgtc tgtgaatcct gggtttggtg gccagagctt tatcgagagt 300
caagtaaaga aa 312

<210> 219
<211> 314
<212> DNA
<213> Zea mays

<400> 219

cctgagcagc gagtccccga ttttatcaag gcagggtgctg atattgttag tgtccactgt 60
gaacagacat cgaccatcca tttgcaccga acagtcaatc agattaaaag tctaggagca 120
aaggcaggag ttgttttgaa tccagcgact ccactcactg caattgatta tgttcttgat 180
gttggtgacc tgggtgctgat tatgtctgtg aatcctgggt ttggtggcca gagctttatc 240
gagagtcaag taaagaaaat tgcagaactg agagagttat gtgcagagaa gggagtgaac 300
ccctggattg aggt 314

<210> 220
<211> 305
<212> DNA
<213> Zea mays

<400> 220

ggcagggtgct gatattgtta gtgtccactg tgaacagaca tcgaccatcc atttgcaccg 60

aacagtcaat cagattaaaa gtctaggagc aaaggcagga gttgtttgaa tccagcgact 120
ccactcactg caattgatta tgttcttgat gttgttgacc tgggtgctgat tatgtctgtg 180
aatcctgggt ttggtggcca gagctttatc gagagtcaag taaagaaaaat tgcagaactg 240
agaaggttat gtgcagagaa gggagtgaac ccctggattg aggttgatgg tgggtgttgg 300
ccgaa 305

<210> 221
<211> 280
<212> DNA
<213> Zea mays

<400> 221

atccatttgc accgaacagt caatcagatt aaaagtctag gagcaaaggc aggagttggt 60
ttgaatccag cgactccact cactgcaatt gattatgttc ttgatgttgt tgacctggtg 120
ctgattatgt ctgtgaatcc tgggtttggt ggccagagct ttatcgagag tcaagtaaag 180
aaaattgcag aactgagaag gttatgtgca gagaaggag tgaaccctg gattgaggtt 240
gatggtggtg ttggtccgaa aaatgcctac aaggttattg 280

<210> 222
<211> 284
<212> DNA
<213> Zea mays

<400> 222

ctgtctgcaa actttgcgaa cgttggtgat caggtaaaaag ctgtggaggt ggcaggatgc 60
gactggattc atgtcgatgt catggacggg cgctttgtgc caaacatcac aattggaccc 120
ttggttggtg atgctctgcg tccagtgact gatcttccgt tggatgtaca tctgatgatt 180
gtggaacctg agcagcgagt ccccgatttt atcaaggcag gtgctgatat tgttagtgtc 240
cactgtgaac agacatcgac catccatttg caccgaacag tcaa 284

<210> 223
<211> 218
<212> DNA
<213> Zea mays

<400> 223

tgtagtgct cactgtgaac agacatcgac catccatttg caccgaacag tcaatcagat 60
 taaaagtcta ggagcaaagg caggagtgtg tttgaatcca gcgactccac tcaactgcaat 120
 tgattaggtt cttgatgtgg ttgacctggg gctgattatg tctgtgaatc ctggggttgg 180
 tggccagagc tttatcgaga gtcaggtaaa gaaaattg 218

<210> 224
 <211> 249
 <212> DNA
 <213> Zea mays

<400> 224

tatcaaggca ggtgctgata ttgtagtggt cactgtgaa cagacatcga ccatccattt 60
 gcaccgaaca gtcaatcaga ttaaaagtct aggagcaaag gcaggagtgt ttttgaatcc 120
 agcgactcca ctcaactgaa ttgattatgt tcttgatggt gtcgccctgg tgctgattat 180
 gtctgtaaat cctggggttg gtggccagag ctttatcgag agtcaagtaa agaaaattgc 240
 agaactgag 249

<210> 225
 <211> 316
 <212> DNA
 <213> Zea mays

<400> 225

gataaggtgc gcacactgag aaagaagtac ccttcccttg acatagaggt tgatggtggt 60
 ctaggtcctt caaccataga cgtggccgca tctgctgggg ccaattgcat cgtcgctgga 120
 agctctatat ttggcgctgc ggaccagga gccatcatat ctgtgctgag gaagagcgtc 180
 gagggctctc agaacaaaaa ctgatttttg tgtttctgct gtaaagtact ccctccgttt 240
 ttttttatte gtcgctttt agttcaaaca tgaactagcg gacgactgat attcgagaat 300
 ggagggagta cttcga 316

<210> 226
 <211> 301
 <212> DNA
 <213> Zea mays

<400> 226

ggttgatggt ggtctaggtc cttcaaccat agacgtggcc gcatctgctg gggccaattg 60
catcgctgct ggaagctcta tatttggcgc tgcggaccca ggagccatca tatctgtgct 120
gaggaagagc gtcgagggct ctcaagaaca aaactgattt tgggtgttct gctgtaaagt 180
actccctccg tttttttatt cgtcgcgttt tagttcaaac atgaactagc ggacgactga 240
tattcgagaa tggagggatt acttcgaccc tgcacgtcag atgagctgat cctcacattg 300
c 301

<210> 227
<211> 247
<212> DNA
<213> Zea mays

<400> 227

cggttattga agctggcgca aatgccattg tgcaggttc tgcagttttt gcggtgtcca 60
gactaacact gcagctatca aaggaatata gaccagccaa agacctctag ctgtagccgc 120
ataaggcgct ggacgtgtaa tcatttactc tgtgcaagtt taccagtgat gcgatctgta 180
tagttgtgtg tcttgtccaa ccatacgtat accgagatga aaagagacgg aggcagtga 240
gaactat 247

<210> 228
<211> 319
<212> DNA
<213> Zea mays

<400> 228

attgagagag ccagagaggt gggcagatgg cgacaccgtc gtcgtcgctt tgctccagct 60
tcgcctccct gcggaccgcc tccatcggcc acccccgcgg catcgcgta tctacgcca 120
ggaaggcggt ccaagtgagg gcatcagctc gggttgacaa gttctcaaag agtgatatca 180
ttgtgtcccc ttcgattctg tctgcaaact tcgccaagct tggatgatcag gtaaaagccg 240
tggaggtggc aggatgtgac tggattcatg tcgatgtcat ggacgggcgc tttgtgccaa 300
atatcacaat tggaccttt 319

<210> 229
<211> 301

<212> DNA
 <213> Zea mays
 <400> 229
 gagagaggcg cgcagatggc gacgccgtcg tcgtcgcttt gctccagctt cgcctccctg 60
 cggaccgcct ccatcggccca ccccggtggc atcgctcct ccacgcccag gaaggcattc 120
 catgtgaggg catcagctcg ggttgacaaa ttctcaaaga gtgacatcat cgtgtcccct 180
 tcgattctgt ctgcaaactt tgcgaacttg gtgatcagg aaaagctgtg gaggtggcag 240
 gatgcgactg gattcatgtc gatgtcatgg acgggcgctt tgtgccaac atcacaattg 300
 g 301

<210> 230
 <211> 268
 <212> DNA
 <213> Zea mays
 <400> 230
 cgcagatggc gacgccgtcg tcgtcgcttt gctccagctt cgcctccctg cggaccgcct 60
 ccatcggccca ccccggtggc atcgctcct ccacgcccag gaaggcattc catgtgaggg 120
 catcagctcg ggttgacaag ttctcaaaga gtgacatcat cgtgtcccct tcgattctgt 180
 ctgcaaactt tgcgaacttc ggtgatcagg taaaagctgt ggaggtggca ggatgcgact 240
 ggattcatgt cgatgtcatg gatgggcg 268

<210> 231
 <211> 256
 <212> DNA
 <213> Zea mays
 <400> 231
 aagcgtcgtc gtcgctttgc tccagcttcg cctccctgcg gaccgcctcc atcgccacc 60
 cccgtggcat cgcctcctcc acgcccagga aggcattcca tgtgagggca tcagctcggg 120
 ttgacaaatt ctcaaagagt gacatcatcg tgtccccttc gattctgtct gcaaactttg 180
 cgaagcttgg tgatcaggta aaagctgtgg aggtggcagg cggcgactgg attcatgtcg 240
 atgtcatgga cgggcg 256

<210> 232
 <211> 319
 <212> DNA
 <213> Zea mays

<400> 232

gctcttgcaa caagccaaac aaccagtggt ctgctagccg agacagggga tagattgaga 60
 gagaggcgcg cagatggcga cgccgtcgtc gtcgctttgc tccagcttcg cctccctgcg 120
 gaccgcctcc atcggccacc cccgtggcat cgcctcctcc acgcccagga aggcattcca 180
 tgtgagggca tcagctcggg ttgacaaatt ctcaaagagt gacatcatcg tgtcccttc 240
 gattctgtct gcaaactttg cgaactctgg tgatcaggta aaagctgtgg aggtggcagg 300
 atgcgactgg attcatgtc 319

<210> 233
 <211> 287
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 233

ccagtggctg ctagccgaga cggggataga ttgacagaca ggcgcgcaga tcgcgacgcc 60
 gtcgtcgctg ctttgcctca gcttcgcctc cctgcggacc gcctccatcg gccacccccg 120
 tggcatcgcc tctccacgc ccagtcaagg cattccatgt gagggcatca gctcgggttc 180
 acaaattctc aaagagtgac atcatcgtgt ccccttcgat tctgtctgca aactttgcga 240
 acttggatgat caggtanaag ctgtggagggt ggcaggatgc gactgga 287

<210> 234
 <211> 261
 <212> DNA
 <213> Zea mays

<400> 234

agaggggata gattgagaga gccagagagg tgggcagatg ggcacaccgt cgtcgtcgct 60
 ttgctccagc ttgcctcccc tgcggaccgc ctccatcggc ccccccgcg gcatcgcgtc 120
 atctacacc aggaaggcgt tccaagtgag ggcacagct cgggttgaca agttctcaaa 180
 gagtgatata attgtgtccc cttcgattct gtctgcaaac ttgcgaagc ttggtgatca 240

ggtaaaagcc gtggaggtgg c

261

<210> 235

<211> 299

<212> DNA

<213> Zea mays

<400> 235

gctcttgcaa caagccaaac aaccagtggt ctgctagccg agacagggga tagattgaga 60

gagaggcgcg cagatggcga cgccgtcgtc gtcgctttgc tccagcttcg cctccctgcg 120

gaccgcctcc atcggccacc cccgtggcat cgctcctcc acgccaggga aggcattcca 180

tgtgagggca tcagctcggg ttgacaaatt ctcaaagagt gacatcatcg tgtccccttc 240

gattctgtct gcaaactttg cgaacgttgg tgatcaggta aaagctgtgg aggtggcag 299

<210> 236

<211> 241

<212> DNA

<213> Zea mays

<400> 236

attgacagac aggcgcgcag atggcgacgc cgctcgctgc gctttgctcc agcttcgcct 60

ccctgcggac cgctccatc ggccaccccc gtggcatcgc ctctccacg cccaggaagg 120

cattccatgt gagggcatca gctcgggttg acaaattctc aaagagtgc atcatcgtgt 180

ccccttcgat tctgtctgca aactttgcga agcttgggtga tcaggtaaaa gctgtggagg 240

t 241

<210> 237

<211> 293

<212> DNA

<213> Zea mays

<400> 237

ctcttgcaac aagccaaaca acccagtggt tgctagccga gacaggggat agattgagag 60

agaggcgcg agatggcgac gccgtcgctg tcgctttgct ccagcttcgc ctccctgcgg 120

accgcctcca tcggccaccc ccgtggcatc gcctcctcca cgcccaggaa ggcattccat 180

gtgagggcat cagctcgggt tgacaaattc tcaaagagtg acatcatcgt gtccccttcg 240

attctgtctg caaactttgc gaactgtggt gatcaggtaa aagctgtgga ggt 293

<210> 238
<211> 325
<212> DNA
<213> Zea mays

<400> 238

accaaatacgc ttaccgcccc cgaagcgtct cggttcgcac agcagagctg ctcttgcaac 60
aagccaaaca acccagtggc tgctagccga gacaggggat agattgagag agaggcgcgc 120
agatggcgac gccgtcgtcg tcgctttgct ccagcttcgc ctccctgcgg accgcctcca 180
tcggccaccc ccgtggcatc gcctcctcca cgcccaggaa ggcattccat gtgagggcat 240
cagctcgggt tgacaaattc tcaaagagt acatcatcgt gtcccccttcg attctgtctg 300
caaactttgc gaacgttggg gatca 325

<210> 239
<211> 301
<212> DNA
<213> Zea mays

<400> 239

cgaagctctc ggttcgcata gcagagctgc tcttgcaaca agccaaaca cccagtggct 60
gctagccgag acaggggata gattgagaga gaggcgcgca gatggcgacg ccgtcgtcgt 120
cgctttgctc cagcttcgcc tccctgcgga ccgcctccat cggccacccc cgtggcatcg 180
cctcctccac gccaggaag ggattccatg tgagggcatc agctcgggtt gacaaattct 240
caaagagtga catcatcgtg tcccccttga ttctgtctgc aaactttgcg aagcttgggtg 300
a 301

<210> 240
<211> 288
<212> DNA
<213> Zea mays

<400> 240

agcagagctg ctcttgcaac aagccaaaca acccagtggc tgctagccga gacaggggat 60
agattgagag agaggcgcgc agatggcgac gccgtcgtcg tcgctttgct ccagcttcgc 120

ctccctgctg accgctcca tcggccaccc ccgtggcatc gcctcctcca cgcccaggaa 180
ggcattccat gtgagggcat cagctcgggt tgacaaattc tcaaagagt acatcatcgt 240
gtccccttcg attctgtctg caaactttgc gaactgtggt gatcagggt 288

<210> 241
<211> 304
<212> DNA
<213> Zea mays

<400> 241

aatcgcttac cgcccccgaa gcgtctcgggt tcgcatagca gagctgctct tgcaacaagc 60
caaacaaccc agtggctgct agccgagaca ggggatagat tgagagagag gcgcgcagat 120
ggcgacgccg tcgtcgtcgc tttgctccag cttcgccctcc ctgcggaccg cctccatcgg 180
ccacccccgt ggcatcgcct cctccacgcc caggaaggca ttccatgtga gggcatcagc 240
tcgggttgac aaattctcaa agagtgcacat catcgtgtcc ctttcgattc tgtctgcaaa 300
cttt 304

<210> 242
<211> 229
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<400> 242

cataactact ctgccaccaa tccggggagg aatcaacct a gcggttaagcg gacatggcgg 60
cggcgaagat agcgcctgct atgctctcgt cggactttgc caacctcgct tcggaggctg 120
agcgcatggt ccgcctaggc gccgactggc tacatatgga catcatggat gggcacttcg 180
ttcctaacct gactattggg gctccgggtga tccagangct tgagaaata 229

<210> 243
<211> 269
<212> DNA
<213> Zea mays

<400> 243

gctacatatg gacatcatgg atgggcactt cgttcctaac ctgactattg gggctccggt 60
gatccagagc ttgaggaaac ataccaaagc atatttgac tgccatctta tggtcacaaa 120

gccttcagat tacgtagaac catttgaaa ggctggcgct tctggattca cattccatat 180
agaagttgct agagacaact ggcaagatct catccaaagc attaaatcaa agggatatgcg 240
gcctggtgta tcattgaggc caggtactc 269

<210> 244
<211> 385
<212> DNA
<213> Zea mays

<400> 244

ccgggctcaa ccaacgcgtc aggatgtttt gaaccaacca acccaatcaa cggaaattga 60
taacttcctg gaggtggttg acctgtggcg gataaggctg gtaaaccggt ggttgggggg 120
caaacctta accaaaagtc aattaaagaa aattgcaaaa ctgaaaaggt aatgtgcaaa 180
aaagggagtg aaccccgga ttgaggttga tgggtggtgtt ggtccgaaaa atgcctacaa 240
ggttattgaa gctggcgcaa atgccattgt cgcaagttct gcagtttttg gggctccaga 300
ctacgctgaa gctatcaaag gaataaagac cagccaaaga cctctagctg tagccgcata 360
aagagctgga cgtgtaatca ttac 385

<210> 245
<211> 389
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 245

gaccaagccg tccaatcaag gtggaggcca tggatgggcc ctttgtgcca aacatcacia 60
ttggaccctg ggggtgtgat gctctgcgtc cagtgactga tcttccgttg gatgtacatc 120
tgatgattgt ggaacctgag cagcgagtcc ctgattttat caaggcaggt gctgatattg 180
ctagtgtcca ctgtgaacag acatcgacct tcatttgcac cgaacagtca atcagattaa 240
aagtctagga gcanaggcag ggattgtint gaatccagcg actccactca ctgcaattga 300
ttacgttctt gatgttggtg acctgggtgct gattatgtct gtgaatcctg ggtttgttgg 360
cagagcttta tcgagagtca agtaaggaa 389

<210> 246

<211> 412
 <212> DNA
 <213> Zea mays

<400> 246

gtgtccccctt cgattctgtc tgcaaacctt gcgaagcttg gtgatcaggt aaaagctgtg 60
 gaggtggcag gatgcgactg gattcatgtc gatgtcatgg acggggcgctt tgtgccaaac 120
 atcacaattg gacccttggg tgttgatgct ctgcgtccag tgactgatct tccgttggat 180
 gtacatctga tgattgtgga acctgagcag cgagtccccg attttatcaa ggcagggtgct 240
 gatattgtta gtgtccactg tgaacagaca tcgaccatcc atttgcaccg aacagtcaat 300
 cagattaaaa gtctaggagc aaaggcagga gttgttttga atccagcgac tccactcact 360
 gcaattgatt acgttcttga tgttggtgac ctgggtgctga ttatgtctgt ga 412

<210> 247
 <211> 397
 <212> DNA
 <213> Zea mays

<400> 247

gatgctctgc gtccagtgc tgatcttccg ttggatgtac atctgatgat tgtggaacct 60
 gagcagcgag tccctgattt tatcaaggca ggtgctgata ttgttagtgt ccaactgtgaa 120
 cagacatcga ccatccattt gcaccgaaca gtcaatcaga ttaaaagtct aggagcaaag 180
 gcaggagttg ttttgaatcc agcgactcca ctcaactgaa ttgattacgt tcttgatgtt 240
 gttgacctgg tgctgattat gtctgtgaat cctgggtttg gtggccagag ctttatcgag 300
 agtcaagtaa agaaaattgc agaactgaga aggttatgtg cagagaaggg agtgaacccc 360
 tggattgagg ttgatggtgg tgttggtccg aaaaatg 397

<210> 248
 <211> 403
 <212> DNA
 <213> Zea mays

<400> 248

ggaggtggca ggatgcgact ggattcatgt cgatgtcatg gacggggcgct ttgtgccaaa 60
 catcacaatt ggacccttgg ttgttgatgc tctgcgtcca gtgactgatc ttccgttga 120

tgtacatctg atgattgtgg aacctgagca gcgagtcccc gattttatca aggcaggtgc 180
 tgatattggt agtgtccact gtgaacagac atcgaccatc catttgcacc gaacagtcaa 240
 tcagattaaa agtctaagag caaaggcagg gaattgtttg aatccagcga cttcacttac 300
 tggaattgat tatggtcctg atggtggtga cctggtgctg attatgtctg tgaatcctgg 360
 gtttgggtggc caaagcttta ttgagagtca agttaaggaa att 403

<210> 249
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 249

gtgaaagccg tggaggtggc aggatgttac tggattcatg tcgatgtcat ggacgggogc 60
 tttgtgccaa atatcacaat tggacctttg gttgttgatg ctctgcgtcc tgtgactgat 120
 cttccattgg atgtacatct gatgattgtg gaacctgagc agcgagtccc tgattttatc 180
 aaggcaggtg ctgatattgt tagtgtccac tgtgaacaaa catcgaccat ccatttgcac 240
 agaacagtca atcagattaa aagtctagga gcaaaagcag gagttgtttt gaatccagcg 300
 actccactca atgcaattga ttacattctt gatgttggtg acctggtggt gattatgtct 360
 gtgaatcctg ggtttggtgg ccagagcttt atcgagagtc aagtnaggaa aattgcaga 419

<210> 250
 <211> 451
 <212> DNA
 <213> Zea mays
 <400> 250

cgatgtcatg gacgggogct ttgtgcaaaa catcacaatt ggacccttgg ttgttgatgc 60
 tctgcgtcca gtgactgata ttccgttggg tgtacatctg atgattgtgg aacctgagca 120
 gcgagtcccc gattttatca aggcaggtgc tgatattggt agtgtccact gtgaacagac 180
 atcgaccatc catttgcacc gaacagtcaa tcagattaaa agtctaggag caaaggcagg 240
 agttgttttg aatccagcga ctccactcac tgcaattgat tatgttcttg atgttggtga 300
 cctggtgctg attatgtctg tgaatcctgg gtttgggtggc cagagcttta tcgagagtca 360
 agtaaagaag attgcagaac tgagaagggt atgtgcagag aaggagtgga acccctggat 420

tgagggtgat ggtggtgttg gtcccaaaaa t

451

<210> 251
<211> 389
<212> DNA
<213> Zea mays

<400> 251

cttggatgatc aggtaaaagc tgtggagggtg gcatgatgac actggattca tgttgatgac 60
atggatgggc gctttgtggc aaacatcaca attggaccct tggttgttga tgctctgcgt 120
ccagtgactg atcttccgtt ggatgtacat ctgatgattg tggaaacctga gcagcgagtc 180
cctgatttta tcaaggcagg tgctgatatt gatagtgtcc actgtgaaca gacatcgacc 240
attcatttgc accgaacagt caatcagatt aaaagtctat gagcaaaggc aggagtgtt 300
gtgaatccag cgactgcact cactgcaatt gattacgttc ttgatgatga tgacctggtg 360
ctgattatgt ctgtgaatcc tgggttttg 389

<210> 252
<211> 426
<212> DNA
<213> Zea mays

<400> 252

ctatgaacag acatcgacca tccatttgca ccgaacaatc aatcagatta aaagtctagg 60
agcaaaggca ggagtgttt tgaatccagc gactccactc actgcaattg attaggggct 120
tgatgttgtt gacctggtgc tgattagggg ggtgaatcct gcgtttggtg gccagagctt 180
tatcgagagt caagtaaaga aaattgcaga actgagaagg ttatgtgcag agaagggagt 240
gaacccctgg attgaggttg atgggtggtg tgggtccgaaa aatgcctaca aggttattga 300
agctggcgca aattctatct tctcagggtc tgcagttttt ggggctccag actacgctga 360
agctatcaaa tggaataaga ccatccaaag acctctagct gtagccgcat aaacaacttg 420
acgtgt 426

<210> 253
<211> 380
<212> DNA
<213> Zea mays

<400> 253

cggacgcgtg ggcggacgcg tgggctgaga aggttatgtg cagagaaggg agtgaacccc 60
tggattgagg ttgatggtgg tgttggtccg aaaaatgcct acaaggttat tgaagctggc 120
gcaaatacca ttgtcgcagg ttctgcagtt tttggggctc cagactacgc tgaagctatc 180
aaaggaataa agaccagcca aagacctcta gctgtagccg cataaggagc tggacgtgta 240
atcatttact ctgtgcaagt ttaccagtga tgcgatctgt atagatgtgt gtcttgtcca 300
gccatacgta taccggagat gaaaagagac ggaagcagtg aagaaatata cttttttttt 360
cttctcattt ttcacgaaga 380

<210> 254

<211> 375

<212> DNA

<213> Zea mays

<400> 254

agagagccag agaggtgggc agatggcgac accgtcgctg tcgctttgct ccagcttcgc 60
ctccctgcgg accgcctcca tcggccaccc ccgcggcatc gcgtcatcta cgcccaggaa 120
ggcgttccaa gtgagggcat cagctcgggt tgacaagtgc tcaaagagtg atatcattgt 180
gtccccttcg attctgtctg caaacttcgc caagcttggt gatcaggtaa aagccgtgga 240
ggtggcagga tgtgactgga ttcattgtga tgtcatggac gggcgctttg tgccaaatat 300
cacaattgga cctttggttg ttgatgctct gcgtcctgtg actgatcttc cattggatgt 360
acatctgatg attgt 375

<210> 255

<211> 429

<212> DNA

<213> Zea mays

<400> 255

cacacgcgtc cgcaacaagc caaacaaccc agtggctgct agccgagaca ggggatagat 60
tgagagagag gcgcgcagat ggcgacgccg tcgtcgtcgc tttgctccag cttcgccctc 120
ctgcggaccg cctccatcgg ccacccccgt ggcacgcct cctccacgcc caggaaggca 180
ttccatgtga gggcatcagc tcgggttgac aaattctcaa agagtgcacat catcgtgtcc 240

ccttcgattc tgtctgcaaa ctttgccaag cttggtgatc aggtaaaagc tgtggaggtg 300
gcaggatgcg actggattca tgtcgatgtc atggacgggc gctttgtgcc aaacatcaca 360
attggaccct tggttgttga tgctctgcgt ccagtgactg atcttccgtt ggatgtacat 420
ctgatgatg 429

<210> 256
<211> 424
<212> DNA
<213> Zea mays
<400> 256

atcgcttacc gccccgaag cgtctcggtt cgcatagcag agctgctctt gcaacaagcc 60
aaacaaccca gtggctgcta gccgagacag gggatagatt gagagagagg cgcgagatg 120
gcgacgccgt cgtcgtcgtt ttgctccagc ttgcctccc tcgggaccgc ctccatcggc 180
caccgccgtg gcatcgctc ctccacgcc aggaaggcat tccatgtgag ggcatcagct 240
cgggttgaca aattctcaaa gagtgacatc atcgtgtccc cttcgattct gtctgcaaac 300
tttgccaagc ttggtgatca ggtaaaagct gtggaggtgg caggatgcga ctggattcat 360
gtcgatgtca tggacgggcg ctttgtgcca aacatcaca ttggaccctt ggttgttgat 420
gctc 424

<210> 257
<211> 419
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<400> 257

cgccccgaa gcgtctcggt tcgcatagca aagctgctct tgcaacaagc caaacaaggc 60
antggctgct agccgagaca ggggatagat tgagagagag gcgcgagat ggcgacgccg 120
tcgtcgtcgc ttgctccag cttgcctcc ctgggaccgc cctccatcgg ccacccccgt 180
ggcatcgct cctccacgct caggaaggca ttccatgtga gggcatcagc tcgggttgac 240
aagttctcaa agagtgcac catcgtgtcc ccttcgattc tgtctgcaaa ctttgccaag 300
cttgggtgatc aggtaaaagc tgtggaggtg gcaggatgcg actggattca tgtcgatgtc 360

atggacgggc gctttgtgcc aaacatcaca attggaccct tggtttgtga tgctctgcg 419

<210> 258
<211> 416
<212> DNA
<213> Zea mays

<400> 258

agaaccaaat cgcttaccgc cccgaagcg tctcggttcg catagcaaag ctgctcttgc 60
aacaagccaa acaaccagtg ggctgctagc cgagacaggg gatagattga gagagaggcg 120
cgcagatggc gacgcccgtc tgcgtcgctt gctccagctt cgcctccctg cggaccgcct 180
ccatcgggca cccccgtggc atcgctcct ccacgctcag gaaggcattc catgtgaggg 240
catcagctcg ggttgacaag ttctcaaaga gtgacatcat cgtgtcccct tcgattctgt 300
ctgcaaactt tgcgaagctt ggtgatcagg taaaagctgt ggaggtggca ggatgcgact 360
ggattcatgt cgatgtcatg gacgggcgct ttgtgccaaa catcacaatt ggaccc 416

<210> 259
<211> 390
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 259

caacaagcca aacaaccagc tggctgctag ccgagacagg ggatagattg agagagaggc 60
gcgcagatgg cgacgccgtc gtcgtcgctt tgctccagct tcgcctccct gcggaccgcc 120
tccatcgggc acccccgtgg catcgctcct tccacgcccc ggaaggcatt ccatgtgagg 180
gcatcagctc gggttgacaa attctcaaag agtgacatca tcgtgtcccc ttcgattctg 240
tctgcaaact ttgcgaagct tggatgatcag gtaaaagctg tggaagtggc aggatgcgac 300
tggattcatg tcgatgtcat ggacgggccc tttgtgccaa acatcacaat tggacccttg 360
ngttgtgatg ctctgcgtcc agtgactgat 390

<210> 260
<211> 415
<212> DNA
<213> Zea mays

<400> 260

gttttgtttg ttgtccgcct ggcgcctggc cccataacta ctctgccaca atccggggaa 60
 gaatcaacct agcggtaagc ggacatggcg gcggcgaaga tagcgccgtc gatgctctcg 120
 tcggactttg ccaacctcgc ttccggaggct gagcgcatgg tccgcctagg cgccgactgg 180
 ctacatatgg acatcatgga tgggcacttc gttcctaacc tgactattgg ggctccggtg 240
 atccagagct tgaggaaaca taccaaagca tatttggact gccatcttat ggtcacaaag 300
 ccttcagatt acgtagaacc atttgaaag gctggcgctt ctggattcac attccatata 360
 gaagttgcta gagacaactg gcaagatctc atccaaagca ttaaataaaa gggtg 415

<210> 261
 <211> 257
 <212> DNA
 <213> Glycine max

<400> 261
 aaaatttcaa ccacagtga ggctacatct cgtgttgaca agttttcaaa aagcgatata 60
 attgtctctc catccattct ttctgcaaac ttgcaagat tgggacaaca ggtgaaagca 120
 ctgcagttgg ctggttgtga ttggcttcac gttgatgtaa tggatggcgg ttttgttcca 180
 aatattacaa ttggacctct tgtcggctga tgcattgcgc cctgtgacag atcttccttt 240
 ggatgtacac ctgatga 257

<210> 262
 <211> 272
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 262

gggagttgaa aganagaaag gaaggatggg agtgacaccg aaaattgctc cttcgatgct 60
 ctcttccgac ttgcocaatt tggcttccga ggctcagcgc atgctccact tcggcgccga 120
 ttggctccac atggacatca tggatgggca ttttgtcccc aatttaacta ttggcgctcc 180
 agttattgaa agtttgagaa agcacacaaa gggatatttg gattgtcacc ttatggttac 240
 aaatcctctt gattatgttg agnccttggc aa 272

<210> 263

<211> 260
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 263

agttgaaaga nagaaaggaa ggatgggagt gacaccgaaa attgctcctt cgatgctctc 60
 ttccgacttc gccaatattg cttccgaggc tcagcgcgatg ctccacttcg gcgccgattg 120
 gctccacatg gacatcatgg atgggcattt tgtccccaat ttaactattg gcgctccagt 180
 tattgaaagt ttgagaaagc acacaaaggg atatttggat tgtcacctta tggttacaaa 240
 tcctcttgat tatgttgagc 260

<210> 264
 <211> 266
 <212> DNA
 <213> Glycine max
 <400> 264

caaggaagga tgggagtgac accgaaaatt gctccttcga tgctctcttc cgacttcgcc 60
 aatttggtt ccgaggctca gcgcgatgctc cacttcggcg ccgattggct ccacatggac 120
 atcatggatg ggtcttttgt cccaattta actattggcg ctccagttat tgaaagtttg 180
 agaaagcaca caaagggata tttggattgt caccttatgg ttacaaatcc tcttgattat 240
 gttgagccct tggcaaaaagc tgggtgc 266

<210> 265
 <211> 228
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 265

tgacaccgaa aattgctcct tcgatgctcn cttccgantt cgcnaatttg gcttccgagg 60
 ctcagcgcgt gctccacttc ggcgcgcgatt ggctccacat ggacatcatg gntgggnatt 120
 ttgtcccaa ttttaactatt ggcgctccag ttattganag tttgagaaag cacacaaagg 180
 gatatttnng attgtcacct tatggttaca aatcctcttg attatgtt 228

<210> 266

<211> 243
 <212> DNA
 <213> Glycine max

<400> 266

caaccataga tgtggccgca tcagcagggg caaactgcat tgttgctgga agttcagtgt 60
 ttggtgcccc tgagccagtt caagtaatat cttactaag gaattctgtt gagaaagccc 120
 agcaaacctt gatacagtaa aaaaaaaatg tcgttttaag ttgcagtaca cttcacaact 180
 ttgcataaac aatatgctta atgtttaaca ttttcataa gttgaataaa agatcatgtg 240
 act 243

<210> 267
 <211> 266
 <212> DNA
 <213> Glycine max

<400> 267

agaggttgat ggtggttttag ggccttcaac catagacgtg gccgcatcag caggggcaaa 60
 ttgcattgtt gctggaagtt ctgttttttg tgcacctgag ccagctcaag taatataccta 120
 ctgaggagtt ctgttgagaa agcccagcaa acctcgatac agtaaaacaa tgctcgtttta 180
 agttgcagta tacttcacaa ctttacataa acaatatgct aatgttaaca tttcataagt 240
 tgaataaaaag atcaagtgct tgaaaa 266

<210> 268
 <211> 229
 <212> DNA
 <213> Glycine max

<400> 268

gaaaatttct gacttgagaa gagtgtgctg ggaaaaggga gtgaatccat ggattgaagt 60
 agatggtgga gttggtccag caaatgctta caagggtgatt gaggctggag ccaatgctct 120
 ggttgcaggc tctgcttggt tggagctaaa gattatgccg aagctataag aggaatcaaa 180
 accagcaaaa gacctgaagc agttgctgtg tgaaatgccc atgtggttc 229

<210> 269
 <211> 266
 <212> DNA

<213> Glycine max

<400> 269

ccccatccc caccccaact tgtatatattgt gcataatatc tatctgcatt ctctctcttc 60
agggagttaa tccatggatt gaagtagatg gtggagttgg tccagcaaatt gcttacaagg 120
tgattgagga tggagccaat gctctgggtg caggctctgc tgtgtttgga gctaaagatt 180
atgccgaagc tataagagga atcaaaacca gcaaaagacc tgaagcagtt gctgtgtgaa 240
atgcccatgt ggttcaatat tcaccg 266

<210> 270

<211> 257

<212> DNA

<213> Glycine max

<400> 270

agcgatatca ttgtctctcc gtccattctt tctgcaaact tttcaaaatt gggagagcag 60
gtgaaagcag tgggaattggc tgggtgtgat tggattcacg ttgatgtaat ggatggtcgc 120
tttgttccaa atattacaat tggacctctt gtggttgatg cattgcgccc tgtgacagat 180
cttcctttgg atgtacacct gatgattgta gacctgaaca aagggtacca gattttatta 240
aggcaggagc tgatata 257

<210> 271

<211> 274

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 271

caagttttca aaaagcgata tcattgtttc tccatccatt ctttctgcaa actttgcaaa 60
attggganag cangtgaaag cagtggagtn gnnggntggt aatnggntca angtn gatgt 120
aatggatggc cngtttngtn ccaaataatta caattggacc tcttgtgggt gatgcattgc 180
cgccccctgtg acagatcttc cttinggatgt acacctgatg attgtagacc ctgaacaaag 240
ggtaccagat tttattaagg caggagcccg atac 274

<210> 272

<211> 281

<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 272

cttcttcctt gtgttcacg accctccaat cccaaatcaa tggattctgc cttcacaaaa 60
cctctctttc ccctcctcgt tccctcactt tctccaggaa gaaaatttca accacagtga 120
aggctacatc tcgtgttgac aagttttcaa aaagcgatat cattgtttct ccctccattc 180
tttctgcaaa ctttgcaaaa ttgggagagc aggtgaaagc agtggagttg gctggttntg 240
atggattcac gttgatgtaa tggatgggagc tttgttccaa a 281

<210> 273
<211> 256
<212> DNA
<213> Glycine max

<400> 273

gatggctgca acctcttctt tgtgctcacc gaccctccaa tcccagatca atggattctt 60
ccttcacaaa acctctcttt ccctactcc ttcctcact ttctccagga ggaaaatttc 120
aaccacagtg aaggctacat ctgagtcga caagttttca aaaagcgata tcattgtctc 180
tccgtccatt ctttctgcaa acttttcaaa attggagagc aagtgaaagc agtagaattg 240
gctggttggtg attgga 256

<210> 274
<211> 273
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 274

gattgctgag tcaaacttga attgaagggtg aagaaggaga tggcagnaac ttcttccttg 60
tgttnatoga nccncaatc ccaaatcaat ggattctgcn ttcacaaaac ctctntttcc 120
catcctcggt cccnacttt ctnaggaag aaaatttcaa ccacagtga ggctacatct 180
cgtgttnaca agttttcaaa aagcgatata attgtttctc catccattct ttntgcaaac 240
tttgcaaaat tgggagagca ggtgaaagca gtg 273

<210> 275
 <211> 260
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 275

ggtnangtaa acttganttg aagtgaagaa ggagatggct gcaacctctt ccttgctgctt 60
 catcgaccct ccaatcccag atcaatggat tcttccttca caaaacctct ctttcccata 120
 ctctttccct cacttttctcc aggaggaaaaa tttcaaccac agtgaaggct acatctcgag 180
 tcgacaagtt ttcaaaaagc gatatcattg tctctccgct cattctttct gcaaactttt 240
 caaaattggg agagcagggtg 260

<210> 276
 <211> 247
 <212> DNA
 <213> Glycine max

<400> 276

gtcaaacttg aattgaaggt gaagaaggag atggcagcaa cttcttcctt gtgttcatcg 60
 accctccaat cccaaatcaa tggattctgc cttcacaaaa cctctctttc ccatcctcgt 120
 tccctcactt tctccaggaa gaaaatttca accacagtga aggctacatc tcgtgttgac 180
 aagttttcaa aaagcgatat cattgtttct ccatccattc tttctgcaaa ctttgcaaaa 240
 ttgggag 247

<210> 277
 <211> 255
 <212> DNA
 <213> Glycine max

<400> 277

ggattgggtga ggtaaacttg aattgaagtg aagaaggaga tggctgcaac ctcttccttg 60
 tgctcatoga ccctccaatc ccagatcaat ggattcttcc ttcacaaaac ctctctttcc 120
 catactcctt ccctcacttt ctccaggagg aaaatttcaa ccacagtga ggctacatct 180
 cgagtcgaca agttttcaaa aagcgatatc attgtctctc cgtccattct ttctgcaaac 240
 ttttcaaaat tggga 255

<210> 278
 <211> 254
 <212> DNA
 <213> Glycine max

<400> 278

cgattggtga ggtaaacttg aattgaagtg aagaaggaga tggctgcaac ctcttccttg 60
 tgctcatcga ccctccaatc ccagatcaat ggattcttcc ttcacaaaac ctctctttcc 120
 catacttctt ccctcacttt ctccaggagg aaaatttcaa ccacagtga ggctacatct 180
 cgagtcgaca agttttcaaa aagcgatatac attgtctctc cgtccattct ttctgcaaac 240
 ttttcaaaat tggg 254

<210> 279
 <211> 276
 <212> DNA
 <213> Glycine max

<400> 279

gcataggatt ggtgaggtaa acttgaattg aagtgaagaa ggagatggct gcaacctctt 60
 ccttggtgctc atcgaccctc caatcccaga tcaatggatt cttccttcac aaaacctctc 120
 tttcccatatc tccttccctc actttctcca ggaggaattt caaccacagt gaaggctaca 180
 tctcgagtcg acaagttttc aaaaagcgat atcattgtct ctcggtccat tctttctgca 240
 aacttttcaa aattgggaga gcaggtgaaa gcagtg 276

<210> 280
 <211> 244
 <212> DNA
 <213> Glycine max

<400> 280

taggattggt gaggtaaact tgaattgaag tgaagaagga gatggctgca acctcttcct 60
 tgtgctcatc gacctccaa tcccagatca atggattctt ccttcacaaa acctctcttt 120
 cccatactcc ttccctcact ttctccagga ggaaaatttc aaccacagtg aaggctacat 180
 ctcgagtcga caagttttca aaaagcgata tcattgtctc tccgtccat ctttctgcaa 240
 actt 244

<210> 281
 <211> 249
 <212> DNA
 <213> Glycine max

<400> 281

cttttgtgaa ggcctaggat tgctgagtca aacttgaatt gaaggtgaag aaggagatgg 60
 cagcaacttc ttccttgtgt tcatcgaccc tccaatccca aatcaatgga ttctgccttc 120
 acaaaacctc tctttcccat cctcgttccc tcactttctc caggaagaaa atttcaacca 180
 cagtgaaggc tacatctcgt gttgacaagt tttcaaaaag cgatatcatt gtttctccat 240
 ccattcttt 249

<210> 282
 <211> 262
 <212> DNA
 <213> Glycine max

<400> 282

cacacacttt tttcaaggca taggattggt gaggcaaact tgaattgaag tgaagaagga 60
 gatggctgca acctcttctt tgtgctcatc gaccctccaa tcccagatca atggattctt 120
 ccttcacaaa acctctcttt ccatactcc ttccctcact ttctccagga ggaaaatttc 180
 aaccacagtg aaggctacat ctcgagtcga caagttttca aaaagcgata tcattgtctc 240
 tccgtccatt ctttctgcaa at 262

<210> 283
 <211> 249
 <212> DNA
 <213> Glycine max

<400> 283

ttttgtcaag gcataggatt ggtgaggtaa acttgaattg aagtgaagaa ggagatggct 60
 gcaacctctt ccttgtgctc atcgaccctc caatcccaga tcaatggatt cttccttcac 120
 aaaaccttct tcccatact ccttccctca ctttctccag gaggaaaatt tcaaccacag 180
 tgaaggctac atctcgagtc gacaagtttt caaaaagcga tatcattgtc tctccgtcca 240
 ttctttctg 249

<210> 284
 <211> 265
 <212> DNA
 <213> Glycine max

<400> 284

cacacagtca cactttttgtg aaggcctagg attgctgagt caaacttgaa ttgaaggtga 60
 cgaaggagat ggcagcaact tcttccttgt gttcatcgac cctccaatcc caaatcaatg 120
 gattctgcct tcacaaaacc tctctttccc atcctcgttc cctcactttc tccaggaaga 180
 aaatttcaac cacagtgaag gctacatctc gtgttgacaa gttttcaaaa agcgatatca 240
 ttgtttctcc atccattctt tctgc 265

<210> 285
 <211> 250
 <212> DNA
 <213> Glycine max

<400> 285

caaggcatag gatcggtgag gcaaacttga attgaagtga agaaggagat ggctgcaacc 60
 tcttccttgt gctcatcgac cctccaatcc cagatcaatg gattcttctt tcacatcacc 120
 tctcttcccc atactccttc cctcactttc tccaggagga aaatttcaac cacagtgaag 180
 gctacatctc gagtcgacaa gttttcaaaa gcgatatcat tgtctctccg tccattcttt 240
 ctgcaaattt 250

<210> 286
 <211> 251
 <212> DNA
 <213> Glycine max

<400> 286

cacacttttg tcaaggcata ggattggtga ggtaaacttg aattgaagtg aagaaggaga 60
 tggctgcaac ctcttccttg tgctcatcga ccctccaatc ccagatcaat ggattcttcc 120
 ttcacaaaac ctctctttcc catactcctt ccctcacttt ctccaggagg aaaatttcaa 180
 ccacagtga ggctacatct cgagtcgaca agttttcaaa agcgatatca ttgtctctcc 240
 gtccattctt t 251

<210> 287
 <211> 273
 <212> DNA
 <213> Glycine max

<400> 287

cttttgtgaa ggcctaggat tgctgagtca aacttgaatt gaagagtgaa gaaggagatg 60
 gcagcaactt cttccttgtg ttcacgacc ctccaatccc aaatcaatgg attctgcctt 120
 cacaaaacct ctctttccca tctcgttcc ctcactttct ccaggaagaa aatttcaacc 180
 acagtgaagg ctacatctcg tgttgacaag ttttcaaaaa gcgatatcat tgtttctcca 240
 tccattcttt ctgcaaactt tgcaaaattg ggg 273

<210> 288
 <211> 273
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 288

cacacacagt canactttng tgaaggccta ggattggtga gtcaaacttg aattgaaggt 60
 gaagaaggag atggcagcaa cttcttcctt gtgttcacg accctccaat cccaaatcaa 120
 tggattctgc cttcacaaaa cctctcttcc ccatcctcgt tccctcactt tctccaggaa 180
 gaaaatttca accacagtga aggctacatc tcgtgttgac aagttttcaa aaagcggata 240
 tcattgtttc tccatccatc tttctgcaaa ttt 273

<210> 289
 <211> 259
 <212> DNA
 <213> Glycine max

<400> 289

cacagtcaca cttttgtgaa ggcctaggat tgctgagtca aacttgaatt gaaggtgaag 60
 aaggagatgg cagcaacttc ttccttgtgt tcatcgaccc tccaatccca aatcaatgga 120
 ttctgccttc acaaaacctc tctttcccat cctcgttccc tcactttctc caggaagaaa 180
 atttcaacca cagtgaaggc tacatctcgt gttgacaagt tttcaaaaag cgatattcatt 240
 gtttctccat ccattcttt 259

<210> 290
 <211> 246
 <212> DNA
 <213> Glycine max

<400> 290

tttcctcaag gcataggatt ggtgaggtaa acttgaattg aagtgaagaa ggagatggct 60
 gcaacctctt ccttggtgtc atcgacctc caatcccaga tcaatggatt cttgcttcac 120
 aaaacctctc ttgctcatat tccttccctc actttctcca ggcggaaaat ttcaaccaca 180
 gtgaaggcta catctcgagt cgacaagttt tcaaaaagcg atatcatgtg gtcgctccgt 240
 ccattc 246

<210> 291
 <211> 262
 <212> DNA
 <213> Glycine max

<400> 291

gctggagttg tcttaaacc cgtaccccc ttaagtcaa tagaatatat ccttgatgtg 60
 gttgatttgg tcttaattat gtccgtaaac cctggctttg gtggccagag ttttattgag 120
 agtcaagtaa agaaaatttc tgatttgaga agattgtgtg cggagaaggg agtgaatcca 180
 tggattgaag tagatggtgg agttggtcca gcaaatgcat acaaggtgat tgaggctgga 240
 gccaatgcac tggttgctgg ct 262

<210> 292
 <211> 282
 <212> DNA
 <213> Glycine max

<400> 292

agggtaccag attttattaa ggcaggagct gatatagtca gtgttcattg tgaacaatct 60
 tccaccatcc atttgcatcg tactgttaat caagtgaaaa gtctgggagc taaagctgga 120
 gttgtcttaa accctgtac ccccttaagt gcaatagaat atgtcctgat gtggtggatt 180
 tgggtctta at tatgtccgta aaccctggct ttggtggcca gagttttatt gagagtcaag 240
 taaagaaaat ttctgacttg agaagagtgt gcgcggaaaa gg 282

<210> 293
 <211> 249
 <212> DNA
 <213> Glycine max

<400> 293

gtcgcctttgt tccaaatatt acaattggac ctcttgtggt tgatgcattg cgccctgtga 60
 cagatcttcc tttagatgta cacctgatga ttgtagagcc tgaacaaagg gtaccagatt 120
 ttattaaggc aggagctgat atagtcagtg ttcattgtga acaatcttcc accatccatt 180
 tgcacgtac agttaatcaa gtgaaaagtc tgggagctaa agctggagtt gtcttaaacc 240
 ccggtaccc 249

<210> 294
 <211> 264
 <212> DNA
 <213> Glycine max

<400> 294

ggtgaaagca gtagaattgg ctggttgtga ttggattcac gttgatgtaa tggatggctg 60
 ctttgttcca aatattacaa ttggacctct tgtggttgat gcattgcgcc ctgtgacaga 120
 tcttcctttg gatgtacacc tgatgattgt agagcctgaa caaagggtag cagattttat 180
 taaggcagga gctgatatag tcagtgttca ttgtgaacaa tcttcacca tccatttgca 240
 tcgtacagtt aatcaagtga aaag 264

<210> 295
 <211> 267
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 295

gtcagtgttc attgtgaaca atcttcncc atccatttgc atcctacagt taacncaagt 60
 gaaaagtctg ggagctaaag ctggagttgt cttaaaccoc ggtaccccct taagtgcaat 120
 agaatatatc cttgatgtgg ttgatttggt cttaattatg tccgtaaacc ctggctttgg 180
 tggccagagt tttattgaga gtcaagtaaa gaaaatttct gatttgagaa gatttgtgtgc 240

ggagaaggga gtgaatccat ggattga

267

<210> 296
<211> 277
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 296

gtccaattgt aatatttggga acaaaacggc catccattac aattngacct cttgtggttg 60
atgcattgcg cctgtgaca nctcttcctt tggatgtaca cctgatgatt gtacagcctg 120
aaciaagggt accagatttt attaaggcag gagctgatat agtcagtgtt cattgtgaac 180
aatcttccac catccatttg catcgtactg ttaatcaagt gaaaagtctg ggagctaaag 240
ctggagttgt ctaaaccctg ctacccctt aagtgc 277

<210> 297
<211> 263
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 297

ggctggagtt gtcttaaacc ccggtacccc cttaagtgc atagaatata tccttgatgt 60
ggttnatttg gtcttaattn tgtaccgtaa accctggctt tggaggccag agttttattg 120
agagtcaagt aaagaaattt ctgatttgag aagattgtgt gcggagaagg gagtgaatcc 180
atggattgaa gtagatgggtg gngttgggtc cagcaaagtc atacaggtga tnggaggctg 240
gnagccaaac cntgggtgcag gcc 263

<210> 298
<211> 388
<212> DNA
<213> Glycine max

<400> 298

ggagaaagaa agaaaagatg ggaatgacac cgaaaatagc tccttcgatg ctctcttccg 60
acttcgcaa tttggcttcc gaggtcagc gcatgctcca cttcggcgcc gattggctcc 120
acatggacat catggatggg cattttgtcc ccaatttaac tattggcgct ccagttattg 180

aaagtttgag aaagcacaca aaggcatatt tggattgtca ccttatgggtt acaaatcctc 240
 ttgattatgt tgaacccttg gcaaaagctg gtgcttctgg ttttacattt cacgtagaga 300
 catcaaaaga taactggaaa gaacttatcc aaagaatcaa gtcacatggc atgattcctg 360
 gtgtagcatt aaagcctggg acccccgt 388

<210> 299
 <211> 368
 <212> DNA
 <213> Glycine max

<400> 299

gatggccgtt ttgttccaaa tattacaatt ggacctcttg tggttgatgc attgcgcctt 60
 gtgacagatc ttcctttgga tgtacacctg atgattgtac agcctgaaca aagggtacca 120
 gatttttagta aggcacgagc tgatatagtc agtgttcatt gtgaacaatc ttccaccatc 180
 catttgcata gtactgttaa tcaagtgaag agtctgggag ctaaagctgg agttgtctta 240
 aaccctgcta ccccttaag tgcaatagaa tatgtccttg atgtggtgga tttggctcta 300
 attaagtccg taaaccctgg ctttgggtggc cacagtttta atgagagtca agtaaagaaa 360
 atttctga 368

<210> 300
 <211> 350
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 300

cgccatcgac ggtgccgacg aggttgaccc tgaccttaac cttgtgaaag ggaggggtgg 60
 tgctcttctt cgtgagaaga tggttgaggc agcatcggac aagtttattg ttattgttga 120
 cgagacaaaa ctagttgatg ggtaggagg tagtggtcta gccatgccag tggaagttgt 180
 gcagttctgc tggaagtaca accttgtaag attgcaggaa ctgtttaagg aggaaggagt 240
 cgaggcaaag ctaaggtttg aaggcgacaa gccctatggt actgacaact ncaactacat 300
 cgtcgattta tacttcaaga cgccaatcaa ggatgcgttg gcagcaggac 350

<210> 301
 <211> 264

<212> DNA
<213> Zea mays

<400> 301

ccgctctcca cgctcgacga caacccgctc atcgacctcg ccatcgacgg tgccgacgag 60
gttgaccctg acctcaacct tgtgaaaggg cggggtggtg ctcttcttcg tgagaagatg 120
gttgaggcag catcgacaa gtttattgtt attgttgacg agacaaaact agttgatggg 180
ttaggaghta gtggtctagc catgccagtg gaagttgtgc agttctgctg gaagtacaac 240
cttctaagat tgcaggaact gttt 264

<210> 302
<211> 267
<212> DNA
<213> Zea mays

<400> 302

caaactgcgg ctgctgtaga tacgcgcgcc gtcactccaa ggtccaagcc tcccttgctc 60
ccgccaccgc cctcaccat gggcagcgcc gccgcctctc cgcagccgctc tgggaatctg 120
acgcaggacg agctcaagcg cgtggcgggc caccgcgcgg tggagtctgt ggagcccggc 180
atgacgctgg gcctgggcac gggttccacg gccgcgcacg cgctggaccg tctgggctac 240
ctactccgcg tgggctcgtt gtccggg 267

<210> 303
<211> 333
<212> DNA
<213> Zea mays

<400> 303

acgcccacgc gtccgtcccg ttcccgatcc tcacacctc aaccccgcg cccccctcc 60
ccaccacct cgccatggtc agcgccgccc cctcgccgcc gccgtccggg aagccgacgc 120
aggacgagct gaagcgcttg ggggcgcacc gcgcggtgga gctcgtggag cccggcatga 180
cgctgggcct gggcacgggc tccacggcg cgacgcgct ggaccgctg ggcgacctcc 240
tccgcgcggg cgcgctgccg ggggtggccg gcgtgccgac ctgctcaag acggatgcgc 300
aagcggcgcg cgctggcatc ccgctgctcc cgc 333

<210> 304
 <211> 420
 <212> DNA
 <213> Zea mays

<400> 304

ggcgtgccca catccaagcg caccttcgag caggcgcagt cgctcggcat cccgctctgg 60
 acgctcgacg acaaccgct catcgacctc gccatcgacg gtgccgacga ggttgaccct 120
 gacctcaacc ttgtgaaagg gcgggggtggt gctcttcttc gtgagaagat ggttgaggca 180
 gcatcggaca agttttattgt tattgttgac gagacaaaac tagttgatgg gttaggaggt 240
 agtggctctag ccatgccagt ggaagttgtg cagttctgct ggaagtacaa ccttgtaaga 300
 ttgcaggaac tgtttaagga ggaaggagtc gaggcaaagc taaggtttga aggcgacaag 360
 ccctatgtta ctgacaactc aaactacatc gtcgatttat acttcaagac gccaatcaag 420

<210> 305
 <211> 432
 <212> DNA
 <213> Zea mays

<400> 305

accttgtaa agggcgggggt ggtgctcttc ttcgtgagaa gatggttgag gcagcatcgg 60
 acaagtttat tgttattggt gacgagacaa aactagttga tgggtagga ggtagtggtc 120
 tagccatgcc agtggaagtt gtgcagttct gctggaagta caaccttgta agattgcagg 180
 aactgtttaa ggaggaagga gtcgaggcaa agctaagggt tgaaggcgac aagccctatg 240
 ttactgacaa ctcaaactac atcgtcgatt tatacttcaa gacgccaatc aaggatgcgt 300
 tggcagcagg acaggaaatt gcagctctgg aaggagttgt tgaccatggg ttgttcttga 360
 acatggcgag ttcagtgatc attgctggaa cggacggtgt cagtgtcaaa acgaagtgag 420
 tttttgagtt gc 432

<210> 306
 <211> 461
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 306

caccaagcat gccgcnnatg ggggtgntgtt ntctgtgaga agatgggtga ggcagcatng 60
gacaagttta ntgttattgt tgacgagaca aaactagttg atggggttagg aggtagtgg 120
ctagccatgc cagtgggaagt tgtgcagttc tgctggaagt acaaccttgt aagattgcag 180
gaactgttta aggaggaagg agtcgaggca aagctaagggt ttgaaggcga caagccctat 240
gttactgaca actcaaacta catcgtcgat ttatacttca agacgccaat caaggatgcc 300
gttggcagca ggacaggaaa ttgcagctct ggaaggagtt gttgaccatg ggttgttctt 360
gaacatggcg agttcagtga tcattgctgg aacggacggt gtcagtgtca aaacgaaatg 420
agtttttgag ttgctttgtt ggttgngttg aaattttttt t 461

<210> 307
<211> 249
<212> DNA
<213> Glycine max

<400> 307

ctcgatctcg ccacgacgg cgccgacgag gtcgaccccg acctcaacct cgtcaaaggc 60
cgcggcggcg cctcctccg cgagaagatg gtcgaggccg cctccgacaa gttcgtcgtg 120
gtcgtcgacg acaccaagct cgtggacggc ctggcggaag gcgggctggc catgccggtg 180
gaggtgggcc agttctgctg gaagtacaat ctggatcggc ttcaggagct tttcaaggaa 240
gaaggtgtg 249

<210> 308
<211> 240
<212> DNA
<213> Glycine max

<400> 308

gtcgaccccg acctcaacct cgtcaaaggc cgcggcggcg cctcctccg cgagaagatg 60
gtcgaggccg cctccgacaa gttcgtcgtg gtcgtcgacg acaccaagct cgtggacggc 120
ctcgcggaag cgggctggcc atgccggtgg aggtgggtcca gttctgctgg aagtacaatc 180
tggatcggtt tcaggagctt ttcaaggaa aaggtgtgga agcaaaattg agattggagg 240

<210> 309
<211> 262
<212> DNA

<213> Glycine max

<400> 309

ggtcgacccc gacctcaacc tcgtcaaagg ccgcggcggc gccctcctcc gcgagaagat 60
ggtcgaggcc gcctccgaca agttcgtcgt ggtcgtcgac gacaccaagc tcgtggacgg 120
cctcggcgga agcgggctgg ccatgccggt ggaggtggtc cagatctgct ggaagtacaa 180
tctggatcgg cttcaggagc ttttcaagga agaaggtgtg gaagcaaaat tgagattgga 240
ggagagtggg aaccctacgt ca 262

<210> 310

<211> 263

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 310

accacacatt caattttana cctctgggcg tggctagctt caaccttta cattaacatg 60
gccattccct acccccattt catcgccacc gagaaagccg ccatggacgc cggcctcctc 120
caccctcct cccctccgt catcctcacc caagacgatt tgaagaaaat cgccgcctac 180
aaggccgtcg agtacgtgga gtccggcatg atcctcggcc tcggcaccgg ctccaccgcc 240
aagcatgccg tcgaccgcat cgg 263

<210> 311

<211> 274

<212> DNA

<213> Glycine max

<400> 311

cttacattcc tttctccacc acacattcaa ttttgaacct ctgggactgg ctagcttcaa 60
cctttaacat taacatggcc attccctacc cccatttcat cgccaccgag aaagccgcca 120
tggaacgcgg cctcctccac ccctcctccc cctccgtcat cctcacccaa gacgatttga 180
agaaaatcgc cgctacaag gccgtcgagt acgtggagtc cggcatggtc ctcggcctag 240
gcaccggctc caccgccaag catgccgtcg accg 274

<210> 312

<211> 333

<212> DNA
 <213> Zea mays

<400> 312

ctcacctccc ctccactccc tttctcccct gactcctgct ctataggatc ctccgcctcc 60
 atcgctcttc gcgcctccaa tcgccttcgg cgcttcgtcc gtctgtctcc acctcttctt 120
 acgccggttg accctgacct caaccttgtg aaagggcggg gtggtgctct tcttcgtgag 180
 aagatggttg aggcagcatc ggacaagttt attgttattg ttgacgagac aaaactagtt 240
 gatgggttag gaggtagtgg tctagccatg ccagtgaag ttgtgcagtt ctgctggaag 300
 tacaaccttg taagattgca ggactgttaa gga 333

<210> 313
 <211> 302
 <212> DNA
 <213> Zea mays

<400> 313

ggatggtgct cgggctcggg acgggctcca cggccgcctt cgccgtcgcc gagatcggcg 60
 cgctcctggc cgcgggcaag ctcgagaaga tcgtcggcgt gccacatcc aagcgcacct 120
 tcgagcaggc gcagtcgctc ggcattccgc tctccacgct cgacgacaac ccgctcatcg 180
 acctcgccat cgacggtgcc gacgaggttg acctgacct caaccttgtg aaagggcggg 240
 gtggtgctct tcttcgtgag aagatggttg aggcagcatc ggacaagttt attgttattg 300
 tt 302

<210> 314
 <211> 244
 <212> DNA
 <213> Glycine max

<400> 314

ctcaaggaca tcgtcggaat cccacctcc aaaaaaccc acgaacaagc cctctccctc 60
 gggatcccc tctccgatct cgacgccac cccgccatcg atctcgccat cgacggcgcc 120
 gacgaggtcg atcccttcct caacctcgtc aagggccgtg gcggctccct cctccgagaa 180
 aaaatggtcg aaggcgcatg caagaagttc atcgtcatcg ttgatgagtc caagctcgta 240
 aact 244

<210> 315
 <211> 267
 <212> DNA
 <213> Glycine max

<400> 315

ccgccatcga tctcgccatc gacggcgccg acgaggtcga ccccttcctc aacctcgtca 60
 agggccgtgg cggtccctc ctccgagaaa aaatgggtcga aggcgcgtgc aagaagttca 120
 tcgtcatcgt tgatgagtc aaagtcgtaa actatttggg gggtagtggg ttggccatgc 180
 ccgttgaggt tattaagttc tgttgaggt tcaccgcggc gaggttgag aagcttcttg 240
 aggaggtgg gtgcgttgcc aggtca 267

<210> 316
 <211> 291
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 316

gatttgaaga aaatcgngc ctacaaggcc gtcgagtacg tggagtcgg catggtcctc 60
 ggcctaggca ccggctccan cgccaagcat gccgtcganc gcatcggcga gctcctccgc 120
 cagggaagc tcaaggacat cgtcggaatc cccacctcca caaaaaccca cgaacaagcc 180
 ctctccctcg ggatccccct ctccgatctc gacgcccacc ccgccatcga tctcgccatc 240
 gacggcgccg acgaggtcga ccccttcctc aacctcgtca agggccgtgg g 291

<210> 317
 <211> 265
 <212> DNA
 <213> Glycine max

<400> 317

agacgacctc aagaaaatcg ccgcctacaa ggccgtcgag tacgtcgagt ccggcatggt 60
 cctcggcctc ggcaccggct ccaactgcaa gcacgccgtc gaccgcatcg gcgagctcct 120
 ccgccaagga aaactcaaag acatcgtcgg catccccacc tccacaaaaa cccacgacca 180
 ggccctctcc ctcgcatcc cctctccga tctcgactcc caccaccg tcgatctcgc 240

catcgacggc gccgacgagg tcgat

265

<210> 318
<211> 265
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 318

cacaccacna cgctccacg ngccttattc nannaccccc taantngngt aaacngcgca 60
ctaccacncc actaccctcc ccgccatcng cgccatcacc ctcacccagg acgaccncaa 120
gagactcgcc gccgacaagg ccgtggagtc cgtcaagagc ggcattgtcc tcggcctagg 180
caccggctcc actgctgcct tcgtcgtcgc caagcttggc gcccttctcg cctccggcca 240
actctccgac atcgtcgggtg tcccc 265

<210> 319
<211> 320
<212> DNA
<213> Zea mays

<400> 319

gagaagtcgg tcaacacgat ccggttcctg gccatcgacg ccgtcgagaa ggccaactcc 60
ggccaccggg gcctcccat gggctgcgcy cccatgggcc acgtcctcta cgacgaggtc 120
atgcgctaca accccaagaa cccctactgg ttcaaccgcy accgcttcgt cctctccgcc 180
ggccacggct gcatgctcca gtacgcctc ctccacctcg ccggttacga cagcgттаag 240
gaggaggact tgaagcagtt ctggcaatgg ggaagcagaa caccgggcca ccctgagaac 300
tttgagactc caggagttga 320

<210> 320
<211> 235
<212> DNA
<213> Zea mays

<400> 320

gtacaccatc tctgacaact ctaccggcaa caagccgggc atcattgtga tgggcaccgt 60
ctccgagctg tagatcgcyg ccaaggccgt cgacgagctg aggaaggagg ggaagacggt 120
ccgcgtcgtc tcgttcgtct cctgggaact ctttgatgag cagtcggatg agcacaagga 180

gatcgtcctc cctgccgccg tcacagcgag gatcagcatc gaagccgggt ccact 235

<210> 321
<211> 276
<212> DNA
<213> Zea mays

<400> 321

ccagattcgc ttaaggctga aaggcggatg gaagctctca tatagtcggg gaagacaaaag 60
aacgttgcac aataaggtat cagaccaggg ctgtgaacag cgatgccatt cgaaatggca 120
cccatagcat gctctcgac accgaagcga atgtttctct cttcaggagt atccctctgg 180
atttctccaa acttcttaag cagtgtcatg tttgacgttg cgagatccga actacctcca 240
agaaatccag gtattacttt ggcaagtgca ttcaag 276

<210> 322
<211> 292
<212> DNA
<213> Zea mays

<400> 322

gcaaccaggc agaaccttgg atggccctat gacacattct ttgtaccaga ggacgtcaag 60
agtcactgga gccgccacac acccgaaggt gctgcacttg aggctgattg gaacgctatg 120
tttgcagagt acgagaagaa gtatgcagat gatgcagcaa cttgaaaag tatcatcacg 180
ggggagttac ccaactggctg ggttgatgct cttcctaaat aactccaga gagcccagga 240
gatgccacca ggaacctctc ccagcagtgc ctgaacgogc ttgctaattg tg 292

<210> 323
<211> 295
<212> DNA
<213> Zea mays

<400> 323

tggaagtgca ctgggtgcc aagaggttga agcaaccagg cagaaccttg gatggcccta 60
cgacacattc tttgtaccag aggacgtcaa gagtcactgg agccgccaca caccgaagg 120
tgctgcactt gaggctgatt ggaacgctaa gtttgcagag tacgagaaga agtatgcaga 180
tgatgcagca accttgaaaa gtatcatcac gggggagtta cccactggct gggttgatgc 240

tcttcctaaa tacactccag agagcccagg agatgccacc taggaactct cccag 295

<210> 324
<211> 285
<212> DNA
<213> Zea mays

<400> 324

agagtacgag aagaagtatg cagatgatgc agcaaccttg aaaagtatca tcacggggga 60
gttaccact ggctgggttg atgctcttcc taaatacact ccagagagcc caggagatgc 120
caccaggaac ctctcccagc agtgcctgaa cgcccttgct aatgttgtgc ctggtcttat 180
cggaggcagt gctgatcttg catcctccaa catgactctg ctgaagatgt ttggtgactt 240
ccagaaggat acagctgaag agcgcaatgt ccgcttcgga gtcag 285

<210> 325
<211> 296
<212> DNA
<213> Zea mays

<400> 325

ggccacagtc aaggagccgg acacaccgaa gcggagcacc tgaggccgat tggaacgcta 60
tgtttgcaga gtacgagaag aagtatgcag atgatgcagc aaccttgaaa agtatcatca 120
cgggggagtt acccactggc tgggttgatg ctcttcctaa atacactcca gagagcccag 180
gagatgccac caggaacctc tcccagcagt gcctgaacgc gcttgctaata gttgtgacctg 240
gtcttattgg aggcagtgct gatcttgcac cctccaacat gactctgctg aagatg 296

<210> 326
<211> 293
<212> DNA
<213> Zea mays

<400> 326

caggagatgc caccaggaac ctctcccagc agtgcctgaa cgcgcttgct aatgttgtgc 60
ctggtcttat tggaggcagt gctgatcttg catcctccaa catgactctg ctgaagatgt 120
ttggtgactt ccagaaggat acagctgaag agcgcaatgt ccgctttgga gtcagagagc 180
acggaatggg cgccatttgc acaggcattg ctctgcacag cccagggttt gttccgtact 240

gtgctacagt ctttgtcttc actgtttaca tgagaggtgc catgaggatc tcg 293

<210> 327
<211> 271
<212> DNA
<213> Zea mays

<400> 327

gtcaagagtc actggagccg ccacacaccc gaaggtgctg cacttgaggc tgattggaac 60
gctatgtttg cagagtacga gaagaagtat gcagatgatg cagcaacctt gaaaagtatc 120
atcacggggg agttacccac tggctggggt gatgctcttc ctaaatacac tccagagagc 180
ccaggagatg ccaccaggaa cctctcccag cagtgcctga acgcgcttgc taatgttgtg 240
cctggtctta ttggaggcag tgctgatctt g 271

<210> 328
<211> 285
<212> DNA
<213> Zea mays

<400> 328

ccaccaggac cctctcccag cagtgcctga acgcgcttgc taatgttgtg cctggtctta 60
ttggaggcag tgctgatctt gcctcctcca acatgactct gctgaagatg tttggagact 120
tccagaagga tacagctgaa gagcgcaatg tccgctttgg agtcagagag cacggaatgg 180
gcgccatttg caacggcatt gctctgcaca gccagggtt tgttccgtac tgtgctacat 240
tctttgtctt cactgattac atgagaggtg ccatgaggat ctgg 285

<210> 329
<211> 274
<212> DNA
<213> Zea mays

<400> 329

ctcgagcgaa tcggctcgag atcacggggg agttacccac tgcttgggtt gatgctcacc 60
ctaaatacac tccagagagc ccaggagatg ccaccaggaa cctctcccag cagtgcctga 120
acgcccttgc taatgttgtg cctggtctta tcggaggcag tgctgatctt gcctcctcca 180
acatgactct gctgaagatg tttggtgact tccagaagga tacagctgaa gagcgcaatg 240

tccgcttcgg agtcagagag cacggaatgg gcgc

274

<210> 330
<211> 187
<212> DNA
<213> Zea mays

<400> 330

ccactggctg ggttgatgct ctccctaaat acactccaga gagcccagga gatgccacca 60
ggaacctctc ccagcagtgc ctgaacgccc ttgctaattgt tgtgcctggg cttatcgag 120
gcagtgtga tcttgcatcc tccaacatga ctctgctgaa gatgtttggg gacttccaga 180
aggatac 219

<210> 331
<211> 219
<212> DNA
<213> Zea mays

<400> 331

gaagtatgca gatgatgcag caaccttgaa aagtatcatc acgggggaggt taccactgg 60
ctgggttgat gctcttcta aatacaactcc agagagccca ggagatgcca ccaggaacct 120
ctcccagcag tgctgaacg cgcttgctaa tgttgctgct ggtcttattg gaggcagtgc 180
tgatcttgca tctccaaca tgactctgct gaagatggt 219

<210> 332
<211> 177
<212> DNA
<213> Zea mays

<400> 332

tcttattgga ggcagtgtg atcttgcatc ctccaacatg actctgctga agatgtgggg 60
tgactcccag aaggatacac tgaagagcgc aatgtccgct ttggagtcag agagcacgga 120
atgggcgcca tttgcaacgg cattgctctg cacagcccag ggtttgttcc gtactgt 177

<210> 333
<211> 261
<212> DNA
<213> Zea mays

<400> 333

cgctcgagcg catcggtcgc agatcacggg ggagttaccc actggctggg ttgatgctat 60
tcctaaatac actccagaga gcccaggagc tgccacagga ccctctccca gcagtgcctg 120
aacgcccttg ctaatgttgt gcctggctct atcggaggca gtgctgatct tgcacctcc 180
aacatgactc tgctgaagat gtttgggtgac ttccagaagg atacagctga agagcgccat 240
gtccgcttcg ggtcagaga g 261

<210> 334

<211> 203

<212> DNA

<213> Zea mays

<400> 334

caggggtctt ggcaagctga tagctttcta cgatgacaac cacatttcca tcgacggaga 60
cacggagatt gcattcacag aggacgtgag caccgccttc gaggtctttg ggtggcacac 120
gatctgggtt aagaatggga acaccggata tgatgacatc cgcgcaccat taaggaggcg 180
aaggcagtca ctgacaagcc cac 203

<210> 335

<211> 289

<212> DNA

<213> Zea mays

<400> 335

gagcgcaatg tccgcttcgc agtcagagag cacggaatgg gcgccatttg caacggcatt 60
gctctgcaca gcccaggggt tgttcgtac tgtgctacat tctttgtctt cactgattac 120
atgagagggtg ccatgaggat ctgggccttg tctgaagccg gagtcatcta tgtcatgacc 180
cacgactcta ttggtctcgc agaagatggc ccgacccatc agcccatcga gcacctggtg 240
agcttcctgc cgatgccgaa catactgatg ctccgccctg ctgatggca 289

<210> 336

<211> 305

<212> DNA

<213> Zea mays

<400> 336

gatgtttggt gacttccaga aggatacagc tgaagagcgc aatgtccgct tcggagtcag 60
 agagcacgga atgggcgcca ttgcaacgg cattgctctg cacagcccag ggtttgttcc 120
 gtactgtgct acattctttg tcttcaactga ttacatgaga ggtgccatga ggatctcggc 180
 cctgtctgaa gccggagtca tctatgtcat gacccacgac tctattggtc tcggagaaga 240
 tggcccgacc catcagccca tcgagcacct ggtgagcttc cgtgcgatgc cgaacatact 300
 gatgc 305

<210> 337
 <211> 275
 <212> DNA
 <213> Zea mays

<400> 337

attacatgag aggtgccatg aggatctcgg ccctgtctga agccggagtc atctatgtca 60
 tgaccacga ctctattggt ctcggaaga atggcccac ccatcagccc atcgagcacc 120
 tggtgagctt ccgtgcgatg ccgaacatac tgatgctccg ccctgctgat ggcaacgaga 180
 ctgccggagc atacaaagtc gcggtcctca acaggaagag gccgtccatc ctgcctctct 240
 ccaggcaaaa gctccctcac ctgcctggca cctcg 275

<210> 338
 <211> 288
 <212> DNA
 <213> Zea mays

<400> 338

agcacctggt gagcttccgt gcgatgccga acatactgat gctccgccct gctgatggca 60
 acgagactgc cggagcatac aaagtcgcgg tcctcaacag gaagaggccg tccatcctcg 120
 ctctctccag gcaaaaagtc cctcacctgc ctggcacctc gatcgagggc gtggagaagg 180
 gcgggtacac catctctgac aactcgaccg gcaacaagcc tgacatcatt gtgatgggca 240
 ccggctccga gctggagatc gcggccaagg ccgccgacga gctgagga 288

<210> 339
 <211> 280
 <212> DNA
 <213> Zea mays

<400> 339

ctgccggagc atacaaagtc gcggtcctca acaggaagag gccgtccatc ctgctctct 60
ccaggcaaaa gtcacctcac ctgcctggca cctcgatcga gggcgtggag aagggcgggt 120
acaccatctc tgacaactcg accggcaaca agcctgacat cattgtgatg ggcaccggct 180
ccgagctgga gatcgcggcc aaggccgccg acgagctgag gaaggagggg aagacggtcc 240
gcgtcgtctc gttcgtctcc tgggaactct ttgatgagca 280

<210> 340

<211> 255

<212> DNA

<213> Zea mays

<400> 340

gtctcgga agatggccc acccatcagc ccatcgagca cctggtgagc ttccgtgcga 60
tgccgaacat actgatgctc cgccctgctg atggcaacga gactgccgga gcatacaaag 120
tcgcggtcct caacaggaag aggccgtcca tcctcgctct ctccaggcaa aagctccctc 180
acctgcctgg cacctcgatc gagggcgtgg agaaggcgcg gtacaccatc totgacactc 240
gaccggcaac aagcc 255

<210> 341

<211> 254

<212> DNA

<213> Zea mays

<400> 341

catctatgtc atgaccacag actctattgg tctcggagaa gatggcccga cccatcagcc 60
catcgagcac ctggtgagct tccgtgcgat gccgaacata ctgatgctcc gccctgctga 120
tggcaacgag actgccggag catacaaagt cgcggtcctc aacaggaaga ggccgtccat 180
cctcgctctc tccaggcaaa agctccctca cctgcctggc acctcgatcg agggcgtgga 240
gaaggcgggg taca 254

<210> 342

<211> 273

<212> DNA

<213> Zea mays

<400> 342

ggagatcgcg gccaaaggccg ccgacgagct gaggaaggag gggaagacgg tccgcgtcgt 60
ctcgttcgtc tcctgggaac tctttgatga gcagtcggat gagtacaagg agagcgtcct 120
ccctgccgcc gtcacagcga ggatcagcat cgaggccggg tccactctcg gctggcagaa 180
gtacgtcggg gccagggca aggccattgg catcgacaag ttcggcgcca gtgctcctgc 240
cgggacgac tacaaggagt acggcatcac cgt 273

<210> 343

<211> 301

<212> DNA

<213> Zea mays

<400> 343

ctatgtcatg acccacgact ctattggtct cggagaggat ggcccgaacc atcagcccat 60
cgagcacctg gtgagcttcc gtgcgatgcc gaacatactg atgctccgcc ctgctgatgg 120
caacgagact gccggagcat acaaagtgcg ggtcctcaac aggaagaggc cgtccatcct 180
cgctctctcc aggcaaaaagc tccctcacct gcctggcacc tcgatcgacg gcgtggagaa 240
tggcgggtac accatctctg acaactcgac cggcaacaag cctgacctca ttgtgatggg 300
c 301

<210> 344

<211> 276

<212> DNA

<213> Zea mays

<400> 344

gcctgacatc attgtgatgg gcaccggctc cgagctggag atcgcggccca aggccgccga 60
cgagctgagg tcatgagggg aagacggtec gcgtcgtctc gttcgtctcc tgggaactct 120
ttgatgagca gtcggatgag tacaaggaga gcgtcctccc tgccgccgtc acagcgagga 180
tcagcatcga ggccgggtcc actctcggtt ggcagaagta cgtcggagcc cagggaagga 240
ccattggcat cgacaagtgc ggcgcgagtg ctctctg 276

<210> 345

<211> 300

<212> DNA
<213> Zea mays

<400> 345

cgacgagctg aggaaggagg ggaagacggt ccgcgtcgtc tcgttcgtct cctgggaact 60
ctttgatgag cagtcggatg agtacaagga gagcgtcctc cctgccgccg tcacagcgag 120
gatcagcatc gaggccgggt ccactctcgg ctggcagaag tacgtcggag ccaggggcaa 180
ggccattggc atcgacaagt tcggcgcgag tgctcctgcc gggacgatct acaaggagta 240
cggcatacc gtggagagca tcattgcagc tgccaagagc ttttaagagc taacaacggt 300

<210> 346
<211> 316
<212> DNA
<213> Zea mays

<400> 346

ggtgccatga ggatctcggc cctgtctgaa gccggagtca tctatgtcat gaccacgac 60
tctattggtc tcggagagga tggcccgacc catcagccca tcgagcacct ggtgagcttc 120
cgtgcgatgc cgaacatact gatgctccgc cctgctgatg gcaacgagac tgccggagca 180
tacatgccg cggtcctcaa caggaagagg ccgtccatcc tcgctctctc caggcaaaag 240
ctccctcacc tgcttggcac ctcgatcgag ggcgtggaga agggcgggta caccatctct 300
gacaactcga ccggca 316

<210> 347
<211> 299
<212> DNA
<213> Zea mays

<400> 347

ctttgatgag cagtcggatg agtacaagga gagcgtcctc cctgctgccg tcacagcgag 60
gatcagcatc gaggccgggt ccactcttgg ctggcagaag tacgtcggag ccaggggcaa 120
ggccattggc atcgacaagt tcggcgcgag tgctcctgcc gggacgatct acaaggagta 180
cggcatacc gtggagagca tcattgcagc tgccaagagc ttttaagagc taacaacggt 240
ctggagtttt ttttattgtc gtcttggatg ccaaaggaac actgtacctt gaggacagt 299

<210> 348
 <211> 242
 <212> DNA
 <213> Zea mays

 <400> 348

 caggcgctcct ccctgctgcc gtcacagcga ggatcagcat cgaggccggg tccactcttg 60
 gctggcagaa gtacgtcgga gcccaggga aggccatttg catcgacaag ttcggcgcgga 120
 gtgctcctgc cgggacgatc tacaaggagt acggcatcac cgtggagagc atcattgcag 180
 ctgccaagag cttttaagag ctaacaacgg tctggagttt tttttattgt cgtcgttgat 240
 gc 242

<210> 349
 <211> 287
 <212> DNA
 <213> Zea mays

 <400> 349

 tctcgagccg gtcctcaaca ggaagaggcc gtccatcctc gctctctcca ggcaaaagct 60
 ccctcacctg cctggcacct cgatcgaggg cgtggagaag ggcgggtaca ccatctctga 120
 caactcgacc ggcaacaagc ctgacatcat tgtgatgggc accggctccg agctggagat 180
 cgcggccaag gccgccgacg agctgaggaa ggaggggaag acggtccgcg tcgtctcggt 240
 cgtctcctgg gaactctttg atgagcagtc ggatgagtag aaggaga 287

<210> 350
 <211> 265
 <212> DNA
 <213> Zea mays

 <400> 350

 gtccactctc ggctggcaga agtacgtcgg agcccaggga aaggccattg gcatcgacaa 60
 gttcggcgcg agtgctcctg ccgggacgat ctacaaggag tacggcatca ccgtggagag 120
 catcattgca gctgccaaga gcctttaaga gctaacaacg gtctggagtt tttcttattg 180
 tcgtcgttga tgccaaagga aactgtacc tagaggacat cctatgcctc ggagcttgga 240
 ataattgatga tggagggagc ggaag 265

<210> 351
 <211> 336
 <212> DNA
 <213> Zea mays

<400> 351

cttcgaggct cttgggtggc acacgatctg ggtaagaat gggaacaccg gatatgatga 60
 catccgcgca ccattaagga ggcgaaggca gttactgaca agcccacctt gatcaagggtg 120
 actaccacga tcggttttgg atctcccaac aaggccaact catacagtgt tcatggaagt 180
 gcactgggtg ccaaataagg tgaagcaacc aggcagaacc ttggatggcc ctatgacaca 240
 ttctttgtac cagaggacgt caagagtcac tggagccgcc acacacccga aggtgctgca 300
 cttgaggctg attggaacgc taagtttgca gagtac 336

<210> 352
 <211> 275
 <212> DNA
 <213> Zea mays

<400> 352

tgatcaccgc cttcaggct cttgggtggc acactatctg ggtaagaat gggaacaccg 60
 gatatgatga catccgcaca ccattaagga ggcgaaggca gttactgaca agcccacctt 120
 gatcaagggtg actaccacat cggtttttga tctcccaaca aggcacaactc atacagtgtt 180
 tatggaagtg cactgggtgc caaagagggt gaagcaacca ggcagaacct tggatggccc 240
 tatgacacat tctctgtacc agaggacgtc aagag 275

<210> 353
 <211> 286
 <212> DNA
 <213> Zea mays

<400> 353

cgggatatga tgacatccgc gcaccattaa ggaggcgaag gcagttactg acaagcccac 60
 cttgatcaag gtgactacca cgatcggttt tggatctccc aacaaggcca actcatacag 120
 tgttcatgga agtgactgg gtgccaaaga ggttgaagca accaggcaga accttggatg 180
 gccctatgac acattctttg taccagagga cgtcaagagt cactggagcc gccacacacc 240
 cgaacgtgct gcacttgagg ctgattggaa cgctaagttt gcagag 286

<210> 354
 <211> 249
 <212> DNA
 <213> Zea mays

<400> 354

cttgggtggc acacgatctg ggtaagaat gggaacaccg gatatgatga catccgcgca 60
 ccattaagga gggaaggca gttactgaca agcccacctt gatcaagggtg actaccacga 120
 tcggttttgg atctcccaac aaggccaact catacagtgt tcatggaagt gcactgggtg 180
 ccaaagaggt tgaagcaacc aggcagaacc ttggatggcc ctatgacaca ttctttgtac 240
 cagaggacg 249

<210> 355
 <211> 423
 <212> DNA
 <213> Zea mays

<400> 355

agctccctca cctgcctggc acctcgatcg agggcgtgga gaaggcgagg tacaccatgt 60
 ctgacaactc gaccggcaac aagcctgacc tcattgtgat gggcaccggc tccgagctgg 120
 agatcgcggc caaggccgcc gacgagctga ggaaggaggg caagacggtc cgcgtcgtct 180
 cgttcgtctc ctgggaactc tttgatgagc agtcggatga gtacaaggag agcgtcctcc 240
 ctgctgccgt cacagcgagg atcagcatcg aggccgggtc cactcttggc tggcagaagt 300
 acgtcggagc ccagggaag gccattggca tcgacaagtt cggcgcgagt gtcctgccg 360
 ggacgatcta caaggagtac ggcatcaccg tggagagcat cattgcagct gccagaagc 420
 ttt 423

<210> 356
 <211> 385
 <212> DNA
 <213> Zea mays

<400> 356

caaccggcac caagcctgac atcattgggt tgggcaccgg ctccgagctg gagatcgagg 60
 gcaatgcggc cgacgagctg aggaaggagg ggaagacggc ccgcgtcgtc tcgttcgtct 120

cctgggaact ctttgatgag cagtcggatg agtacaagga gagcgtcctc cctgcccagc 180
 tcacagcgag gatcagcatc gaggccgggt ccactctcgg ctggcagaag tacgtcggag 240
 cccaaggcaa ggccattggc atcgacaagt tcggcgcgag tgctcctgcc gggacgatct 300
 acaaggagta cggcatcacc gtggagagca tcattgcaac tgccaagagc ttttaagagc 360
 taacaacggt ctgggagttt ttttt 385

<210> 357
 <211> 279
 <212> DNA
 <213> Glycine max

<400> 357

atgctaagtt tgctgagtat gaaaagaaat acaaggagga agctgcagaa ttgaaatcta 60
 ttatcaatgg tgaattccct gctgggtggg agaaagcact tccgacatac actccagaga 120
 gccagcgga tgccaccaga aacctgtctc aaacaaacct taatgccctt gcaaagggttc 180
 ttcccgggtct gcttgggtggc agtgcagatc ttgcttcttc caacatgacc ttgctcaaaa 240
 tgttcgggga cttccagaag gatactccag cagagcgta 279

<210> 358
 <211> 246
 <212> DNA
 <213> Glycine max

<400> 358

ccttgctcaa aatgttcggg gacttccaaa aggatactcc agcagagcgt aatgttagat 60
 tcggtgtag agaacacgga atgggagcta tctgcaacgg cattgctctt cacagccctg 120
 gactgattcc atattgtgca accttctttg tattcactga ctacatgaga ggtgccataa 180
 ggctttctgc gctgtctgag gctgggggta tttatgtcat gacccatgat tcaataggac 240
 ttggag 246

<210> 359
 <211> 220
 <212> DNA
 <213> Glycine max

<400> 359

caataaccag tgagagtcac aatcaaata tagggaatgg gttaatcctt ggaacagggc 60
 tgattccata ttgtgcaacc ttctttgtat tcactgacta catgagaggt gccataaggc 120
 tttctgcgct gtctgaggct ggggttattt atgtcatgac ccatgattca ataggacttg 180
 gagaagatgg gccaacccac cagcctattg agcacctagc 220

<210> 360
 <211> 263
 <212> DNA
 <213> Glycine max

<400> 360

cagaaacctg tctcaaaca accttaatgc ccttgcaaag gttcttcccg gtctgcttgg 60
 tggcagtgc gatcttgctt cttccaacat gaccttgctc aaaatgttcg gggacttcca 120
 aaaggatact ccagcagagc gtaatgttag attcgggtgt agagaacacg gaatgggagc 180
 tatctgcaat ggcaattgctc ttcacagccc tggactgatt ccatattgtg caaccttctt 240
 tgtattcact gactacatga gag 263

<210> 361
 <211> 308
 <212> DNA
 <213> Glycine max

<400> 361

tccttcccat cattctctgg cctcaagtca cattctacat gcaaagcagc agcagccacg 60
 tcctcgcgta gaaggggtgc ttgtccatcc accaacgttg ttcgagccgc tgcggttgag 120
 aactcgcacc aaaccaccga ggtttctctg gtggagaaat ccgtcaacac cattcggttt 180
 ttggccattg atgcagttga gaaggccaac tctggtcacc ctggtctccc catgggggtg 240
 gctccaatgg gtcacattct ctacgatgag ataatgaggt acaatcctaa gaaccccggt 300
 gggttcaac 308

<210> 362
 <211> 263
 <212> DNA
 <213> Glycine max

<400> 362

tgctgtttca gccagagtta gcattgaggc aggatcaaca tttgggtggg agaaaattgt 60
 tggagcaaaa gggaaaagca ataggcattg atcgttttgg agctagtgtt ccagctggaa 120
 gaatatacaa agaatttggg atcactaagg aagctgttgt tgctgcagct aaagagctta 180
 tctagaactt ttgatttttt ttgccttctg gttttggttg agagcattcc atgtcatgaa 240
 taagaaaaag gttaaataatc ctt 263

<210> 363
 <211> 332
 <212> DNA
 <213> Glycine max

 <223> unsure at all n locations
 <400> 363

aaccattggt tatggttctc ctaacaaggc taactcctac agtgtgcatg gaagtgcact 60
 gggtgccaaa gaagttgang ccacaaggca gaaccttgga tggtcacatg agccattcca 120
 cgtgcctgag gatgtcaaaa agcattggag tcgccacacc cctgaggggtg ctgcacttga 180
 agctgaatgg aatgctaagt ttgctgagta tgaaaagaat acaaggagga agctgcagaa 240
 ttgaaatcta ttatcaatgg tgaattccct gctggttggg agaaagcact tccgacatac 300
 actccagaga gcccacgggt gccaccagaa ac 332

<210> 364
 <211> 247
 <212> DNA
 <213> Glycine max

 <400> 364

aaccattggt tatggttctc ctaacaaggc taactcctac agtgtgcatg gaagtgcact 60
 gggtgccaaa gaagttgatg ccacaaggca gaaccttgga tggtcacatg agccattcca 120
 cgtgcctgag gatgtcaaaa agcattggag tcgccacacc cctgaggggtg ctgcacttga 180
 agctgaatgg aatgctaagt ttgctgagta tgaaaagaaa tacaaggagg aagctgcaga 240
 attgaaa 247

<210> 365
 <211> 238
 <212> DNA

<213> Glycine max

<400> 365

caaggctaac tcctacagtg tgcattggaag tgcactgggt gccaaagaag ttgatgccac 60
aaggcagaac cttggatggg cacatgagcc attccacgtg cctgaggatg tcaaaaagca 120
ttggagtcgc cacaccctg aggggtgctgc acttgaagct gaattggaatg ctaagtttgc 180
tgagtatgaa aagaaataca aggaggaagc tgcagaattg aaatctatta tcaatggg 238

<210> 366

<211> 253

<212> DNA

<213> Glycine max

<400> 366

gggtgccaaa gaagttgatg ccacaaggca gaaccttga tggtcacatg agccattcca 60
cgtgcctgag gatgtcaaaa agcattggag tcgccacacc cctgaggggtg ctgcacttga 120
agctgagtg aatgctaagt ttgctgagta tgaaaagaaa tacaaggagg aagctgcaga 180
attgaaatct attatcaatg gtgaattccc tgctggttgg gagaaagcac ttccgacata 240
cactccagag agc 253

<210> 367

<211> 171

<212> DNA

<213> Glycine max

<400> 367

gttctcctaa caaggctaac tcctacagtg tgcattggaag tgcactgggt gccaaagaag 60
ttgatgccac aaggcagaac cttggatggg cacatgagcc attccacgtg cctgaggatg 120
tcaaaaagca ttggagtcgc cacaccctg aggggtgctgc acttgaagct g 171

<210> 368

<211> 277

<212> DNA

<213> Glycine max

<400> 368

atacgagcct ttccatgtgc cagaagatgt taaaaagcat tggagtcgcc ataccctga 60

gggtgctaaa cttgaagctg agtggaatgc caagtttgca gaatatgaga agaaatacag 120
 tgaggaagct gcagagctga aggctattat tactgtgaat taccagctgg ttgggagaaa 180
 gcacttccga catacactcc agaaagccct gctgatgcta caagaaatct gtctcagcaa 240
 aatctaaatg cccttggttaa ggttcttctt ggtctac 277

<210> 369
 <211> 268
 <212> DNA
 <213> Glycine max

<400> 369

gctacaagga agaatcttgg atggccatac gagcctttcc atgtgccaga agatgtcaag 60
 aagcattgga gtcgccatac acctgagggt gctaaacttg aagctgagtg gaatgccaaag 120
 tttgtggaat atgagaagca atacagtgaag gaagctgcag agctgaaggc tattattact 180
 ggcgaattac cagcaagttg ggagaaagca cttccgacat acacaccaga aagccctgct 240
 gatgctacaa gaaatctgtc tcagcaaa 268

<210> 370
 <211> 258
 <212> DNA
 <213> Glycine max

<400> 370

taaagaagca aaggctgtca aagacaaacc cactttgatc aaggtaacca ctaccattgg 60
 atttggttct ccaaacaagg ctaattccta cagtgttcat gggagtgcac taggtgctaa 120
 agaagtggat gctacaagga agaatcttgg atggccatac gagcctttcc atgtgccaga 180
 agatgtcaag aagcattgga gtcgccatac acctgagggt gctaaacttg aagctgagtg 240
 gaatgccaaag tttgtgga 258

<210> 371
 <211> 247
 <212> DNA
 <213> Glycine max

<400> 371

gccatacccc tgagggtgct aaacttgaag ctgagtggaa tgccaagttt gcagaatatg 60

agaagaaata cagtgaggaa gctgcagagc tgaaggctat tattactggt gaattaccag 120
 ctggttgga gaaagcactt ccgacataca ctccagaaag ccctgctgat gctacaagaa 180
 atctgtctca gcaaaatcta aatgcccttg ttaaggttct tcttggtcta cttggtggca 240
 gtgcaga 247

<210> 372
 <211> 264
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 372

ggagtcgcca tacacctgag ggtgctaaac ttgaagctga gtggtntgcc aagtttgtgg 60
 aatatgagaa gcaatacagt gaggaagctg cagagctgaa ggctattatt actggcgaat 120
 taccagctgg ttgggagaaa cacttccgac atacacacca gaaagccctg ctgatgctac 180
 aagaaatctg tctcagcaaa atctaaatgc ccttgtaag gttcttctg gtctacttgg 240
 tggtagtga gatcttgct cttc 264

<210> 373
 <211> 245
 <212> DNA
 <213> Glycine max
 <400> 373

gtggaatgcg aagtttgcag aatatgagaa gacatacagt gaggaagctg cagagctgaa 60
 ggctattatt actggtgaat taccagctgg ttgggagaaa gcacttccga catacactcc 120
 agaaagccct gctgatgcta caagaaatct gtctcagcaa aatctaaatg cccttggtta 180
 gggtcttctt ggtctacttg gtggcagctgc agatcttgcc tcttccaaca tgaccttgtt 240
 gaaat 245

<210> 374
 <211> 242
 <212> DNA
 <213> Glycine max
 <400> 374

tggaatgcc agtttgcaga atatgagaag aaatacagtg aggaagctgc agagctgaag 60

gctattatta ctggtgaatt accagctggt tgggagaaag cacttccgac atacactcca 120
gaaagccctg ctgatgctac aagaaatctg tctcagcaaa atctaaatgc ccttgттааg 180
gttcttctg gtctacttgg tggcagtgcа gatcttgсct cttccaacat gaccttgттg 240
aa 242

<210> 375
<211> 246
<212> DNA
<213> Glycine max

<400> 375

gcagaatatg agaagaaata cagtгaggaa gctgcagagc tgaaggctat tattactggt 60
gaattaccag ctggttggga gaaagcactt ccgacataca ctccagaaaг ccctgctgat 120
gctacaagaa atctgtctca gcaaaatcta aatgcccttg ttaaggттct tcctggtcta 180
cttggtggca gtgcagatct tgcctcttcc aacatgacct tgттgaaatc atacggagat 240
ttccaa 246

<210> 376
<211> 236
<212> DNA
<213> Glycine max

<400> 376

ggatgctaca aggaagaatc ttggatggcc atacgagcct ttccatgtgc cagaagatgt 60
caagaagcat tggagtcgcc atacacctga gggtgctaaa cttgaagctg agtggaatgc 120
caagtttgтg gaatatgaga agcaatacag tgaggaagct gcagagctga aggctattat 180
tactggcgaa ttaccagctg gttgggagaa agcacttccg acatacacac cagaaa 236

<210> 377
<211> 253
<212> DNA
<213> Glycine max

<400> 377

attggagtcg ccatacccct gagggtgcta aacttgaaгc tgagtggaat gccaaгttг 60
cagaatatga gaagaaatac agtgaggaag ctgcagagct gaaggctatt attactgгtg 120

aattaccagc tgggtgggag aaagcacttc cgacatacac tccagaaagc cctgctgatg 180
 ctacaagaaa tctgtctcag caaaatctaa atgccctttt aaggttcttc ctggtctact 240
 tgggtggcagt gca 253

<210> 378
 <211> 250
 <212> DNA
 <213> Glycine max

<400> 378

acagtgttca tgggagtgcg ttaggtgcta aagaagtgga tgctacaagg tagaatctgg 60
 gatggccata cgagcctttc catgtgccag aacgtgtcaa gaagcattgg agtcgccata 120
 cacctgaggg tgctaaactt gaagctgagt ggaatgccaa gtttgtggaa tatgagaagc 180
 aatacagtga ggaagctgca gagctgaagg ctattattac tggcgaatta ccagctgggt 240
 gggagaaagc 250

<210> 379
 <211> 268
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 379

aaacaaggct aattcctaca gtgttcatng gagtncatta ggtgctaaag aagncgatgc 60
 tacaagg nag aatcttgat ggccatacga gcctttccat gtgccagang atgtcaagaa 120
 gcattggagt cgccatacac ctgaggggtgc taaacttgaa gctgagtgga atgccaaagt 180
 tgtggaatat gagaagcaat acagtgaggn agctgcagag tgaaggctat tattactggc 240
 gaattaccag ctggttggn nanancct 268

<210> 380
 <211> 248
 <212> DNA
 <213> Glycine max

<400> 380

tgctaaagaa gtggatgcta caaggaagaa tcttgatgg ccatacgagc ctttccatgt 60

gccaacagat gtcaagaagc attggagtcg ccatacacct gagggtgcta aacttgaagc 120
 tgagtggaat gccaaagtttg tggaatatga gaagcaatac agtgaggaag ctgcagagct 180
 gaaggctatt attactggcg aattaccagc tggttgggag aacgcacttc cgacatacac 240
 accagaaa 248

<210> 381
 <211> 167
 <212> DNA
 <213> Glycine max

<400> 381

tgcaattccg atctacacac cagatagccc tgctgatgct acaagaaatc tgtctcagca 60
 aaatctaaat gcccttggtta aggttcttcc tggctacttt ggtggtagtg cagatcttgc 120
 ctcttccaac atgaccttat tggaatcgta tggggatttc caaaaga 167

<210> 382
 <211> 173
 <212> DNA
 <213> Glycine max

<400> 382

atgggagtgct attaggtgct aaagaagtgg atgctacaag gaagaatctt ggatggccat 60
 acgagccttt ccatgtgcc aagatgtac aagagcattg gagtcgccat acacctgagg 120
 gtgctaaact tgaagctagt ggaatgccaa gtttgtggaa tatgagaagc aat 173

<210> 383
 <211> 298
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 383

ttggatttgg ttctccaaac aagggtctaat tcctacagtg ttcattgggag tgcattaggt 60
 gctaaaagaa gtngatgcta caaggaagaa tcttgatgg ccatacgagc ctttccatgt 120
 gccagaagat gtcaagaagc attggagtcg ccatacactg aggggtgctaa acttgaagct 180
 gagtggaatg ccaagtttgt ggaatatgag aagcaataca gtgaggaagc tgcagagctg 240
 aaggctatta tactggcgat taccagctgg ttgggagaaa gcattccgac atacacac 298

<210> 384
 <211> 273
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 384

g t t a g a t t t g g t g t t a g t g a a c a t g g a a t g g g a g c a a t c t g t a a t g g t a t t g c t c t t c a t 60
 a g c c c c g g a t t c a t t c c a t a c t g t g c a a c t t t c t t t g t c t t c a c t g a c t a c a t g a g a g c t 120
 g c c a t a a g g a t t t c t g c a c t g t g t g a a g c t g g a g t t a t n c n a g t g a t g a c t c a t g a t t c g 180
 a t t g g a c t t g g a g a g g a t g g a c c a a c t c a t c a g c c a a t a g a g c a c t t g g c a a g c t t c a g g 240
 g c a a t g c c a a a c a t t t g a t g c t t c g t c c a g c t g 273

<210> 385
 <211> 295
 <212> DNA
 <213> Glycine max
 <400> 385

g t t a g g t t t g g t g t t a g a g a c a t g g a t t g g g a g c a a t c t g t a a c g g t a t t g c t c t t c a t 60
 a g t t c c g g a t t c a t t c c a t a c t g t g c a a c t t t c t t t g t c t t c a c t g a c t a t a t g a g a g c t 120
 g c c a t a a g g a t t t c t g c a c t g t g t c g g g c t g g a g t t a t t t a t g t g a t g a c t c a t c a t t c g 180
 a t t g g a c t t g g a g a g g a t g g a c c a a c t c a t c a g c c a a t a g a g t a t t t g g c a a g c t t c a g g 240
 g c a a t g c c t c a c a c t t t g a t g c t t c g t c c a g c t g a t g t a t a t g a a c t g c t g g a t c 295

<210> 386
 <211> 260
 <212> DNA
 <213> Glycine max
 <400> 386

g c a a a a t c t a a a t g c c c t t g t t a a g g t t c t t c c t g g t c t a c t t g g t g g t a g t g c a g a t c t 60
 t g c c t c t t c c a a c a t g a c c t t a t t g a a a t c g t a t g g g g a t t t c c a a a a g a a t a c t c c c g a 120
 a g a g c g c a a t g t t a g g t t t g g t g t t a g a g a c a t g g a a t g g g a g c a a t c t g t a a c g g t a t 180
 t g c t c t t c a t a g c c c c g g a t t c a t t c c a t a c t g t g c a a c t t t c t t t g t c t t c a c t g a c t a 240

tatgagagct tccataagga

260

<210> 387
<211> 249
<212> DNA
<213> Glycine max

<400> 387

gcctcttcca acatgacctt gttgaaatca tacggagatt tccaaaagaa tactcccgaa 60
gagcgcaatg ttagatttgg tgtagagaa catggaatgg gagcaatctg taatgggtatt 120
gctcttcata gccccggatt cattccatac tgtgcaactt tctttgtctt cactgactac 180
atgagagctg ccataaggat ttctgcactg tgtgaagctg gagttattta tgtgatgact 240
catgattcg 249

<210> 388
<211> 252
<212> DNA
<213> Glycine max

<400> 388

gggatttcca aaagaatact cccgaagagc gcaatgtag gtttggtgtt agagaacatg 60
gaatgggagc aatctgtaac ggtattgctc ttcataagccc cggattcatt ccatactgtg 120
caactttctt tgtcttcact gactatatga gagctgccat aaggatttct gactgtgtg 180
aagctggagt tatattatgtg atgactcatg attcgattgg acttggagag gatggaccaa 240
ctcatcagcc aa 252

<210> 389
<211> 255
<212> DNA
<213> Glycine max

<400> 389

agcagatctt gcctcttcca acatgacctt attgaaatcg tatggggatt tccaaaagaa 60
tactcccgaa gagcgcaatg ttaggtttgg tgtagagaa catggaatgg gagcaatctg 120
taacgggtatt gctcttcata gccccggatt cattccatac tgtgcaactt tctttgtctt 180
cactgactat atgagagctg ccataaggat ttctgcactg tgtgaagctg gagttattta 240

tgtgatgact catga

255

<210> 390
<211> 260
<212> DNA
<213> Glycine max

<400> 390

gggagcaatc tgtaatggta ttgctcttca tagccccgga ttcattccat actgtgcaac 60
tttttttgtc ttcactgact acatgagagc tgccataagg atttctgcac tgtgtgaagc 120
tggagttatt tatgtgatga ctcatgattc gattggactt ggagaggatg gaccaactca 180
tcagccaata gagcacttgg caagcttcag ggcaatgcc aacactttga tgcttcgtcc 240
agctgatggt aatgaaactg 260

<210> 391
<211> 238
<212> DNA
<213> Glycine max

<400> 391

ccggattcat tccatactgt gcaactttct ttgtcttcac tgactatatg agagctgcc a 60
taaggatttc tgcactgtgt gaagctggag ttatttatgt gatgactcat gattcgattg 120
gacttggaga ggatggacca actcatcagc caatagagca tttggcaagc ttcagggcaa 180
tgccaaacac tttgatgctt cgtccagctg atggtaatga aactgctgga tcatacaa 238

<210> 392
<211> 248
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 392

gcaaaatcta aatgcccttg ttaaggttct tcctggtcta cttggtgnnc gtgcagatct 60
tgctcttcc aacanngacc ttgttgaaat catacggaga tttccaaaag aatactcccg 120
aagagcgcaa tgttagattt ggtgttagag aacatggaat gggagcaatc tgtaatggta 180
ttgcncttca tagccccgga ttcattccata ctgtgcaact tttnttgtct tcattggacta 240
catgagag 248

<210> 393
 <211> 167
 <212> DNA
 <213> Glycine max

<400> 393

catgacctta ttgaaatcgt attgggattt ccaaaagact actcccgaag agcgcaatgt 60
 taggtttggt gttagagAAC atggaatggg agcaatctgt aacggtattg ctcttcatag 120
 acccggattc attccatact gtgcaacttt ctttgtcttc actgact 167

<210> 394
 <211> 91
 <212> DNA
 <213> Glycine max

<400> 394

gactacatga gagctgccat aaggatttct gcactgtgtg aaagctggag ttatttatgt 60
 gatgactcat ggattcgatt ggacttggag a 91

<210> 395
 <211> 288
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 395

tgaattccga caatggggga gcaggactcc tggacatcct gagaactttg agacagttgg 60
 aattgaagtg actacaggtc ctcttgggtca gggcattgcc aatgctgttg ggtagcact 120
 agctgagaaa cacttggctg cacgatttaa caagcctgac aatgagattg ttgaccatta 180
 cacatatgtt atattgggtg atggttgtca aatggaggga atttcaaatg aagcatgctc 240
 acttgccggg cactgggggtc tagggaagct tatngcttta atgatgac 288

<210> 396
 <211> 262
 <212> DNA
 <213> Glycine max

<400> 396

caagacctta aggaattccg acaatgggga agcagaactc ctggacatcc tgagaacttt 60
gagacccttg gagttgaagt gaccacaggt cctcttggtc agggcattgc caatgctggt 120
ggattagcac tagctgagaa gcacttggct gcacgattta acaagcctga caatgagatt 180
gttgaccatt acacatatgt tatattgggt gatggttgtc aaatggaggg aatttcaaatt 240
gaagcatgct cacttgccgg tc 262

<210> 397
<211> 279
<212> DNA
<213> Glycine max
<223> unsure at all n locations
<400> 397

cgcttggtc aacntgacc gtttcgttct ctctgctgga tctggctgca tgctccaata 60
tgctctcctt cancttgctg gctatnacac tggtcaggaa caagacctta aggaattccg 120
acaatgggga agcagaactc ctggacatcc tgagaacttt gagacccttg gagttgaagt 180
gaccacaggt cctcttggtc agggcattgc caatgctggt ggattagcat agctgagaag 240
cacttggtc cactgattaac aagcctgaca atgagatgt 279

<210> 398
<211> 254
<212> DNA
<213> Glycine max
<400> 398

tgacactgtt caggaacaag accttaagga attccgacaa tggggaagca gaactcctgg 60
acatcctgag aactttgaga cccttgaggt tgaagtgacc acaggtcctc ttggtcaggg 120
cattgccaat gctgttggt tagcactagc tgagaagcac ttggctgcac gatttaacaa 180
gcctgacaat gagattgttg accattacac atatgttaat tgggtgatgg ttgtcaaattg 240
gaggggaattt caaa 254

<210> 399
<211> 264
<212> DNA
<213> Glycine max
<400> 399

gttgaaaagg gtggttacac catttcggac aactccactg gcaacaagcc tgatgtcatt. 60
 ttgatcggaa ctggttcgga attggaaatc gctgccaaag ctgctgatga cctaaggaag 120
 gaagggaagg ctggttagagt tgtttccctt gtttcttggg aactttttga tgagcaatca 180
 gaagcctaca aggagagtgt tttccctgct gctgtttcag ccagagttag cattgaggca 240
 ggatcaacat ttgggtggga gaaa 264

<210> 400
 <211> 258
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 400

gttgaaaagg gtggttacac catttcggac aactccactg gcaacaagcc tgatgtcatt 60
 ttgatcggaa ctggttcgga attggaaatc gctgccaaag ctgctgatga cctaaggaag 120
 gaagggaagg ctggttagagt tgtttccctt gtttcttggg aactttttga tgagcaatca 180
 gnagcctaca aggagagtgt tttccctgct gctgtttcag ccagagttag cattgaggca 240
 ggatcaacat ttgggtgg 258

<210> 401
 <211> 249
 <212> DNA
 <213> Glycine max
 <400> 401

gagttgaaaa ggggtggttac accatttcgg acaactccac tggcaacaag cctgatgtca 60
 ttttgatcgg aactgggttcg gaattggaaa tcgctgccaa agctgctgat gacctaaagga 120
 aggaagggaa ggctgttaga gttgtttccc ttgtttcttg ggaacttttt gatgagcaat 180
 cagaagccta caaggagagt gttttccctg ctgctgtttc agccagagtt agcattgagg 240
 caggatcaa 249

<210> 402
 <211> 273
 <212> DNA
 <213> Glycine max

<400> 402

gagttgaaaa ggggtggttac accatttcgg acaactccac tggcaacaag cctgatgtca 60
ttttgatcgg aactggttcg gaattggaaa tcgctgcaa agctgctgat gacctaagga 120
aggaagggaa ggctgttaga gttgtttccc ttgtttcttg ggaacttttt gatgagcaat 180
cagaagccta caaggagagt gttttccctg ctgctgtttc agccagagtt agcattgagg 240
caggatcaac atttgggtgg gagaaaattg ttg 273

<210> 403

<211> 256

<212> DNA

<213> Glycine max

<400> 403

cactcttctt cttcttcttc ttcttcactc tacaaccact aaactaagtg gttgggtttg 60
gtttagtttc atttttttga agctcttaaa cttaaggctt aagccatggc atcctcatcc 120
tctctgcac tctctcaggc ccttctggca cgtgctgtgt accttcatgg ctcttcttct 180
tctgaccgtg tctcactctc cttcccatca ttctctggcc tcaagtcaca ttctgcatgc 240
tccaatatgc tctcct 256

<210> 404

<211> 233

<212> DNA

<213> Glycine max

<400> 404

ctaaactaag tggttgggtt tggtttagtt tcattttttt gaagcgctta aacttaaggc 60
ttaagccatg gcacccatc cctctctgca tctatctcag gcccttctgg cacgtgctgt 120
gtaccttcat ggctcttctt cttctgaccg tgtctcactc tccttcccat cattctctgg 180
cctcaagtca cattctacat gcaaagcagc agtagccacg tcctcgcgta gaa 233

<210> 405

<211> 247

<212> DNA

<213> Glycine max

<400> 405

aactaagtgg ttggttttgg tttagtttca tttttttgaa gctcttaaac ttaaggctta 60
agccatggca tcctcatcct ctctgcatct atctcaggcc cttctggcac gtgctgtgta 120
ccttcatggc tcttcttctt ctgaccgtgt ctcaactctcc ttcccatcat tctctggcct 180
caagtcacat tctacatgca aagcagcagc agccacgtcc tcgcgtagaa ggggtgcttg 240
tccatcc 247

<210> 406
<211> 243
<212> DNA
<213> Glycine max

<400> 406

aaacactctt cttcttcttc ttcttcttca ctctacaacc actaaactaa gtggttgggt 60
ttggtttagt ttcatttttt tgaagctctt aaacttaagg ctttaagccat ggcatcctca 120
tcctctctgc atctatctca ggcccttctg gcacgtgctg tgtaccttca tggctcttct 180
tcttctgacc gtgtctcact ctcccttcca tcattctctg gcctcaagtc acattctaca 240
tgc 243

<210> 407
<211> 215
<212> DNA
<213> Glycine max

<400> 407

ttttggttta gtttcattgt tctgaagctc ttaaaacttaa ggcttaagcc atggcatcct 60
catcctctct gcactatct caggcccttc tggcacgtgc tgtgtacctt catggctctt 120
cttctctgac cgtgtctcac tctccttccc atcattctct ggctcaagt cacattctac 180
atgcaaagca gcagcagcca cgtcctcgcg tagaa 215

<210> 408
<211> 276
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 408

tcttcttctt cactctacaa ccactannct aagtgggttg ttttggttta gtttcatttt 60

tttgaagctc ttaaacttaa ggcttaagcc atggcatcct catcctctct gcatctatct 120
caggcccttc tggcacgtgc tgtgtacctt catggctctt cttcttctga ccgngtctca 180
ctctccttcc catcattctc tggcctcaag tcacattcta catgcaaagc agcancagcc 240
acgtcctcgc gtagaagggg tgcttgtcca tccacc 276

<210> 409
<211> 289
<212> DNA
<213> Glycine max

<400> 409

tcttcttctt cttcttcttc actctacaac cactaaacta agtggttggt tttggtttag 60
tttcattttt ttgaagctct taaacttaag gcttaagcca tggcatcctc atcctctctg 120
catctatctc aggcccttct ggcacgtgct gtgtaccttc atggctcttc ttcttctgac 180
cgtgtctcac tctccttccc atcattctct ggcctcaagt cacattctac atgcaaagca 240
gcagcagcca cgtcctcgcg tagaaggggt gcttgtccat ccaccaacg 289

<210> 410
<211> 221
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 410

tcttcttctt cactctacaa ccactaaact aagtggttgg ntttggttta gtttcatttt 60
tttgaagctc ttaaacttaa ggcttaagcc atggcatcct catcctctct gcatctatct 120
caggcccttc tggcacgtgc tgtgtacctt catggctctt cttcttctga ccgngtctca 180
ctctccttcc catcattctc tggcctcaag tcacattcta t 221

<210> 411
<211> 255
<212> DNA
<213> Glycine max

<400> 411

cttcttcttc ttcttcttct tcaactctaca accactaaac taagtggttg gttttggttt 60

agtttcattt ttttgaagct cttaaactta aggccttaagc catggcatcc tcatcctctc 120
 tgcattctatc tcaggccctt ctggcacgtg ctgtgtacct tcatggctct tcttcttctg 180
 accgtgtctc actctccttc ccatcattct ctggcctcaa gtcacattct acatgcaaag 240
 cagcagcagc cacgt 255

<210> 412
 <211> 333
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 412

anattgtaga ccantanaca tatgtnatat tnggtgatgg ntgtcaaag gagggantnt 60
 caaatgaagc atgctcactt gccggtcact ggggtctagg gaagcttatn gcttnatatg 120
 atgacaacca catttccatt gatggggaca ctgagattgc attcactgag aatgttgatc 180
 aacgttttga ggcacttggg tggcatgtaa tttgggtgaa gaatggaaat actggatatg 240
 atgaaattcg tgcagccatt aaggaagcaa aggctgtcaa agacgaaccc actatgatcc 300
 aggtaaccac taccattgga ttggttctcc aaa 333

<210> 413
 <211> 260
 <212> DNA
 <213> Glycine max
 <400> 413

aacaagcctg acaatgagat tggtgaccat tacacatatg ttatattggg tgatggttgt 60
 caaatggagg gaatttcaaa tgaagcttgc tcacttgccg gtcactgggg tctaggaaag 120
 ctcatgtctt tatatgatga caatcacatt tccattgatg gtgacactga gattgcattc 180
 actgagaatg ttgatcagcg ttttgaagca cttggatggc atgtaatttg ggtgaagaat 240
 ggaaatactg gatatgatga 260

<210> 414
 <211> 288
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations

<400> 414

cacttggctg cacgatttaa caatcctgnc antgagattg ttgaccatta nacatatgtt 60
atattgggtg atggttgtca aatggaggga atttcaaag aagcatgctc acttgccgnc 120
tcactggggt ctagggaagc ttattgcttt ntatgatgac aaccacattt ccattnctgg 180
ggacactgag attgcattca ctgagantgt tgatcaacgt ttgaggcact tgggtggcat 240
gtaatttggg tgaagaatgg anatactgga tatgatgaaa ttcgtgcg 288

<210> 415

<211> 242

<212> DNA

<213> Glycine max

<400> 415

gaatttcaaa tgaagcatgc tcacttgccg gtcactgggg tctaggggaag cttattgctt 60
tatatgatga caaccacatt tccattgatg gggacactga gattgcattc actgagaatg 120
ttgatcaacg ttttgaggca cttgggtggc atgtaatttg ggtgaagaat ggaaatactg 180
gatatgatga aattcgtgca gccattaagg aagcaaaggc tgtcaaagac aaaccacta 240
tg 242

<210> 416

<211> 251

<212> DNA

<213> Glycine max

<400> 416

caaatggagg gaatttcaaa tgaagcatgc tcacttgccg gtcactgggg tctaggggaag 60
cttattgctt tatatgatga caaccacatt tccattgatg gggacactga gattgcattc 120
actgagaatg tgatcaacgt tttgaggcac ttgagtggca tgtaatttgg gtgaagaatg 180
gaaatactgg atatgatgaa attcgtgcag ccattaagga agcaaaggct gtcaaagaca 240
cccactatga t 251

<210> 417

<211> 245

<212> DNA

<213> Glycine max

<400> 417

gcacgattta acaagcctga caatgagatt gttgaccatt acacatatgt tatattgggt 60
gatggttgtc aaatggaggg aatttcaa at gaagcatgct cacttgccgg tcaactgggt 120
ctaggaagc ttattgcttt atatgatgac aaccacattt ccattgatgg ggacactgag 180
attgcattca ctgagaatgt tgatcaacgt tttgaggcac ttgggtggca tgtaatttgg 240
gtgaa 245

<210> 418

<211> 249

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 418

gttgatcang cgttttgnaa gcacttggat ggcatgtaat ttgggtgaag natggaaata 60
ctggatatga tgaaattgcy tgcagccatt aaagaagnaa aggctgtcaa agacaaaccc 120
actttgatca aggtanccac tagnattgga ttaggttctc caaacaaggc taattcncac 180
agtgttcatg ggncgtgcat taggtgctaa agaagtggat gctacnangn anaatnttgg 240
atggcnata 249

<210> 419

<211> 240

<212> DNA

<213> Glycine max

<400> 419

cattgatgca gttgagaagg ccaactctgg tcaccctggg ctccccatgg ggtgtgctct 60
aatgggctca cattctctac gatgagataa tgagggtacaa ttctaagaac cccgcttggg 120
tcaaccgtga cgtttcgttc tctctgctgg acatggctgc atgctccaat atgctctcct 180
tcaccttggc ggctatgaca ctgttcagga acaagacctt aaggaattcc gacaatgggg 240

<210> 420

<211> 283

<212> DNA

<213> Glycine max

<400> 420

caagattggtt ggaagcaaag gaaaggccat aggcatatgat cgatttggag caagtgtctc 60
agctggaaaa atatacaagg agtttgggtat caccaaggaa gctgttattg ctgctgccaa 120
agaactttcg tagatatatt tgttgagttt cttttatctc atctagaact tgtgggtttc 180
acttgtggct ttgggttact gttacatgac ttgttttttg agatatcact ttagccacaa 240
taaggaagat tagatgttct gcatatgatt gtcagaggaa cca 283

<210> 421
<211> 259
<212> DNA
<213> Glycine max

<400> 421

caagattggtt ggaagcaaag gaaaggccat aggcatatgat cgatttggag caagtgtctc 60
agctggaaaa atatacaagg agtttgggtat caccaaggaa gctgttattg ctgctgccaa 120
agaactttcg tagatatatt tgttgagttt cttttatctc atctagaact tgtgggtttc 180
acttgtggct ttgggttact gttacatgac ttgttttttg agatatcact ttagccacaa 240
taaggaagat tagattggtt 259

<210> 422
<211> 256
<212> DNA
<213> Glycine max

<400> 422

caagattggtt ggaagcaaag gaaaggccat aggcatatgat cgatttggag caagtgtctc 60
agctggaaaa atatacaagg agtttgggtat caccaaggaa gctgttattg ctgctgccaa 120
agaactttcg tagatatatt tgttgagttt cttttatctc atctagaact tgtgggtttc 180
acttgtggct ttgggttact gttacatgac ttgttttttg agatatcact ttagccacaa 240
taaggaagat tagatt 256

<210> 423
<211> 271
<212> DNA
<213> Glycine max

<223> unsure at all n locations

<400> 423

aaaggaaagg ccatagggcat tgatcgattt ggagcaagtg ctccagctgg aaaaatatac 60
aaggagtttg gtatcaccaa ggaagctggt attgctgctg ccaaagaact ttcgtaatat 120
atttgttgag tntcttttat ctcatctaga acttggtggtt ttcacttggtg gctttggggtt 180
actgtttacat gacttgtttt ttgagatata acttttagcca caatanggaa gatagattgt 240
tcttgcatat gattgtcaga ggaaccactt a 271

<210> 424

<211> 258

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 424

tctgcactgt gtgaagctgg agttatttat gtgatgactc atgattcgat tggacttgga 60
gaggatggac caactcatca gccaatagag catttggtcaa gcttcagggc aatgccaaac 120
actttgatgc ttgtccagct gatggnaatg aaactgctgg atcatacaaa gttgctgtgg 180
ttaacaggaa gagaccctca attcttgcac tttctaggca aaagttgacc caacttccag 240
ganttctatt gagggagt 258

<210> 425

<211> 209

<212> DNA

<213> Glycine max

<400> 425

gctgatggta atgaaactgc tggatcatac aaagttgctg tggttaacag gaagagaccc 60
tcaattcttg cactttctag gcaaaagtgt acccaacttc caggaacttc tattgagggg 120
gttgaaaagg gtggctacac catttcagac aactcatcag gtaacaagcc tgatgttatt 180
ttgattggaa ctggttctga gttggaaat 209

<210> 426

<211> 257

<212> DNA

<213> Glycine max

<400> 426

cgaccaactc atcagccaat agagcatttg gcaagcttca gggcaatgcc aaacacttag 60
atgcttcgtc cagctgatgg taatgaaact gctggatcat acaaagttgc tgtgggtaac 120
aggtagagac cctcaattct tgcactttct aggcaaaagt tgacccaact tccaggaact 180
tctattgagg gatttgaaaa ggggtggctac accattctcg aacagctcat caggtaacaa 240
gccggatggt attttga 257

<210> 427
<211> 246
<212> DNA
<213> Glycine max
<400> 427

gctgtgggta acaggaagag accctcaatt cttgcacttt ctaggcaaaa gttgacccaa 60
cttccaggaa cttctattga gggagttgaa aagggtggct acaccatttc agacaactca 120
tcaggtaaca agcctgatgt tatTTtgatt ggaactgggt ctgagttgga aattgctgct 180
gctgctgctg aggatctagg aaaggaagga aaagctgtta gagttgtttc ttttgtttagc 240
tgggaa 246

<210> 428
<211> 168
<212> DNA
<213> Glycine max
<400> 428

gaccaactca tcagccaata gagcacttgg caagcttcag ggcaatgcca aacactttga 60
tgcttcgtcc agctgatggt aatgaaactg ctggatcata caaagttgct gtgggtaaca 120
ggaagagacc ctcaattctt gcactttcta ggcaaaagtt gacccaac 168

<210> 429
<211> 168
<212> DNA
<213> Glycine max
<400> 429

aattcttgca ctttctaggc aaaagttgac ccaacttcca ggaacttcta ttgagggagt 60
tgaaaagggg ggctacacca tttcagacaa ctcatcaggt aacaagcctg atgttatttt 120

gattggaact ggttctgagt tggaaattgc tgctgctgct gctgagga 168

<210> 430
<211> 254
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 430

ctcatgattc gattggactt gggagaggat ggaccaacta catcagccaa tagagcattt 60
ngcaagcttc agggcaatgc caaacacttn cntgcttcgt ccagctatgg taatgaaact 120
gctggatcat acaaagttgc tgtggttaac aggaagagac cctcaattct tgcactttct 180
agncaaaagt tgaccaact tccaggaact tctattggag gtgaaaaggg tggtacacc 240
atttcagana actc 254

<210> 431
<211> 117
<212> DNA
<213> Glycine max

<400> 431

aattcttgca cttgctaggg aaaagttgac ccagcttcca ggaacttcta ttgagggagt 60
tgaaaagggt ggctacacca tttcagacaa ctcatcaggt aacaagcctg atgttat 117

<210> 432
<211> 263
<212> DNA
<213> Glycine max

<400> 432

atgagagggt ccataaagct ttctgcgctg tctgaggctg gggttattta atgtcatgac 60
ccatgattca ataggacttg gagaagatgg gccaacccac cagcctattg agcacctagc 120
aagcttccgg gcaatgccaa acattttgat gcttcgtccc gccgacggta acgaaacagc 180
cggagcatac aaagtggccg tgctcaacag gaagagaccc tccattcttg ccctatccag 240
gcaaaaactg ccccagcttc ccg 263

<210> 433

<211> 257
 <212> DNA
 <213> Glycine max

<400> 433

cattttgatg cttcgtcctg cgcacggtaa cgaaacagcc ggagcataca aagtggccgt 60
 gctcaacagg aagagaccct ccattcttgc cctatccagg caaaaactgc ccagcttcc 120
 cggaacttcc attgaaggag ttgaaaaggg tggttacacc atttcggaca actccactgg 180
 caacaagcct aatgacattt ggaccggaac tggttcggaa ttggaaatcg ctgccaaagc 240
 tgctgatgac ctaagga 257

<210> 434
 <211> 253
 <212> DNA
 <213> Glycine max

<400> 434

tcatgacca tgattcaata ggacttggag aagatgggcc aaccaccag cctattgagc 60
 acctagcaag cttccgggca atgccaaaca ttttgatgct tcgtcccgcc gacggtaacg 120
 aaacagccgg agcatacaaa gtggccgtgc tcaacaggaa gagaccctcc attcttggcc 180
 tatccaggca aaaactgccc cagcttcccg gaacttccat tgaaggagtt gaaaaggggtg 240
 gttacaccat ttc 253

<210> 435
 <211> 134
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 435

ttggagaaga tgggccaacc caccagoccta ttgagcacct agnnagcttc cgggcaatgc 60
 caaacatttt gatgcttcgt cccgccgacg gtaacgaaac agccgnagca taccaagtgg 120
 ccgtgtcaac aggg 134

<210> 436
 <211> 387
 <212> DNA
 <213> Glycine max

<400> 436

cccacgcgtc cgcccacgcg tccgggtcac aacaaccatt ggttatgggt ctcctaaca 60
ggctaactcc tacagtgtgc atggaagtgc actgggtgcc aaagaagttg atgccacaag 120
gcagaacctt ggatgggtcac atgagccatt ccacgtgcct gaggatgtca aaaagcattg 180
gagtcgccac acccctgagg gtgctgcact tgaagctgaa tggaatgcta agtttgctga 240
gtatgaaaag aaatacaagg aggaagctgc agaattgaaa tctattatca atgggtgaatt 300
ccctgctggt tgggagaaaag cactttcgac atacactcca gagagcccag cggatgccac 360
cagaaacctg tctcaaaca accttaa 387

<210> 437

<211> 316

<212> DNA

<213> Glycine max

<400> 437

ggggttatth atgtcatgac ccatgattca ataggacttg gagaagatgg gccaaccac 60
caccctattg agcacctagc aagcttcgag gcaatgcaa acattttgat gcttcgtccc 120
gccgacggta acgaaacagc cggagcatac aaagtggccg tgctcaacag gaagagaccc 180
tccattcttg ccctgtccag gcaaaaaactg cccagcttc ccggaacttc cattgaagga 240
gttgaaaagg gtggttacac catttcggac aactccactg gcaacaagcc tgatgtcatt 300
ttgatcggaa ctggtt 316

<210> 438

<211> 301

<212> DNA

<213> Zea mays

<400> 438

gtcatcttcc acgtctccaa gaccggcggc cacctcgggt ccagcctcgg cgtgggtggag 60
ctcaccgtcg cgctgcacta cgtcttcaac ggcgcgcagg accgcctcct ctgggacgtc 120
ggccaccagt cgtaccgcga caagatcctg acggggcggc gcgacaagat gccgacgatg 180
cggcagacca acggcctggc gggcttcccc aagcgcgccg agagcgagta cgacagcttc 240
ggcacggggc acagctccac caccatctcc gcggcgctcg ggatggcggg gggccgggac 300

c

301

<210> 439
 <211> 265
 <212> DNA
 <213> Zea mays

<400> 439

cggtgccgcc caactacaaa ggcaactcccc tcgaggtcgg caaaggcagg atcctgcttg 60
 agggcgaccg ggtggcgctg ctgggggtacg ggtcggcagt gcagtactgc ctgactgccg 120
 cgcccttgtt gcagcgccac ggctcaagg tcaccgtcgc cgacgcgagg ttctgcaagc 180
 cgctggacca cgccctgata aggagcctgg ccaagtccca cgaggtgctc atcaccgtgg 240
 aggaaggctc catcggcggg ttcgg 265

<210> 440
 <211> 245
 <212> DNA
 <213> Zea mays

<400> 440

gtgggcccggg acctcaaggg cggcaagaac aacgtggctg cggtgatcgg cgacggcgcc 60
 atgacggccg ggcaggcgta cgaggccatg aacaacgccg ggtacctgga ctccgacatg 120
 atcgtcatcc tcaacgacaa caagcagggtg tccttgccca cggcgacgct cgacgggccc 180
 gtgccgcccg taggcgcgct cagcagcgac ctcagcaagc tgcagtcaag caggccgctc 240
 aagga 245

<210> 441
 <211> 156
 <212> DNA
 <213> Zea mays

<400> 441

gaagcaggtc ggtggctcag tgcacgagct ggcggcgaag gtggacgagt acgcccgcgt 60
 catgatcagc gggcccggct cctcgctctt cgaggagctc ggtctctact acatcgcccc 120
 cgtcgacggc cacaacatcg acgacctcat caccat 156

<210> 442
 <211> 271
 <212> DNA
 <213> Zea mays

<400> 442

gtgtacgtga cggtagccga cgcccgggtc tgcaagccgc tggacacggc gctgatccgg 60
 gagctcgccg ccgagcacga ggtgctgata accgcccagg agggatccat cggcgggttc 120
 ggctcccacg tcgcacacta cctcagcctg accggcctcc tggacggggc cctcaaactg 180
 agatccatgt tcctgccgga ccggtacatc gaccatggcg caccgcagga ccagatcgag 240
 gattcagggc tgacgccgcg gcacatcgcc g 271

<210> 443
 <211> 288
 <212> DNA
 <213> Zea mays

<400> 443

ccgacgcccg gttctgcaag ccgctggaca cggcgtgat ccgggagctc gccgccgagc 60
 acgaggtgct gatcacgcc gaggaggat ccacggcgg gttcggtcc cactcgccc 120
 actacctcag cctgaccggc ctctggacg ggcccctcaa actgagatcc atgttctcgc 180
 cggaccggta catcgacat ggcgaccgc aggaccagat cgatgaggca gggctgacgc 240
 gcggcacatc gccgccaccg tgctgtccct gctggggagg ccattgga 288

<210> 444
 <211> 340
 <212> DNA
 <213> Zea mays

<400> 444

aagagcacca agaccaccgg ccccgctctc atccacgtcg tcaccgagaa gggccgcggc 60
 tacccttacg ccgagcgagc cgccgacaag taccacgtg tcgccaagtt tgatccggcg 120
 accgggaagc agttcaagtc ccccgccaag acgtgtcct acaccaacta cttcgccgag 180
 gcgctcatcg ccgagggcgg ccaggacagc aagatcgtgg ccattccacgc ggccatgggc 240
 ggcggcacgg ggctcaacta cttcctccgc cgcttcccga accggtgctt cgacgtcggg 300
 atcgcgga gcacgccgtc acgttcgggc cggctggctg 340

<210> 445
 <211> 245
 <212> DNA
 <213> Zea mays

<400> 445

gtaccacggt gtcgccaagt ttgatccggc gaccgggaag cagttcaagt cccccgcaa 60
 gacgctgtcc tacaccaact acttcgccga ggcgctcatc gccgaggcgg agcaggacag 120
 caagatcgtg gccatccacg cggccatggg cggcggcacg gggctcaact acttcctccg 180
 ccgcttcccg agccggtgct tcgacgtcgg gatcgcgagg cagcacgccg tcacgttcgc 240
 ggccg 245

<210> 446
 <211> 298
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 446

cgatctgcag aagctaccgg taaggttcgt catggacagg gccgggctgg tcggcgcgga 60
 cgggccgacc cactgcgggg cggtcgacgt cgcgtacatg gcctgcctgc ccaacatggt 120
 cgtcatggcc ccgtccgacg aggccgagct ctgccacatg gtcgccaccg ccgcggcaat 180
 cgacgaccgc ccgtcctgct tccgctaccc gagaggcaac ggcgttggcg tcccgttgcc 240
 gnccaactac aaaggcactc ccctcgaggt cgggcaaagc aggatcctgc tggagggc 298

<210> 447
 <211> 333
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 447

cagggccggg ctggtcggcg cggacgggcc gaccactgc gggcggttcg acgtcgcgtg 60
 catggcctgc ctgcccaca tggtcgtcat ggccccgtcc gacgaggccg agctctgcc 120
 catggtcgcc accgccgcg caatcgacga ccgccccgtcc tgcttcgct acccgagagg 180
 caacggcggtt ggcgtcccgt tgccgccc aa ctacaaaggc actcccctcg aggtcggcaa 240

aggcaggatc ctgctggagg gcgacaccgg ggngctgctg gngtacgggt cgggagtga 300
gnactggctg accgtcgct acctgggtga gcg 333

<210> 448
<211> 240
<212> DNA
<213> Glycine max

<400> 448

caacaagcag gtttctttac caactgctac tcttgatgga cccataccac ctgtaggagc 60
cttgagtagc gctctcagta gattacaatc aaataggcct cttagagaat tgagagaggt 120
tgccaaggga gttcctaaac gaattggagg tcctatgcat gaattggctg caaaagttga 180
cgagtatgct cgtggcatga tcagtgggtc tggatcatca ctttttgaag agcttggact 240

<210> 449
<211> 309
<212> DNA
<213> Glycine max

<400> 449

aatgcagggt accttgactc taacatgata attatactta atgacaacaa gcaagtttct 60
ttgcctactg ctactattga tggcctgca actccaattg gagcccgcaa tagtgctta 120
agcaaaattc aagcaagcac caaataccgc aaactgagag aagctgcgaa aggcattaca 180
aagcagatag gaggaacaac acacaacttg cagcaaaggt agatgagtat gcaagaggta 240
tgatcagtgg ttctagtact acacttggtg aggagctcgg cttatactac atatgcctg 300
tggatggtc 309

<210> 450
<211> 233
<212> DNA
<213> Glycine max

<400> 450

aaaacaactg gtctgtgct gctccatgtt gtcactgaaa aaggccatgg atatccatat 60
gcagaaagag cagcagatta gtaccatgga gttactaagt ttgatccatt aactggaaaa 120
caattcaaatt tcaatgctgc caccagttta tacacaacat actttgcaga ggctttaatt 180

tctgaagcgg aagcttacia agacattgtc ggaatccatg ctgcaatggg agg 233

<210> 451
<211> 268
<212> DNA
<213> Glycine max

<400> 451

tgtgattctg tatgatagcc gtcactcttt acttccaaaa attgaggagg gcccaaagac 60

atttgtcaat gccctatcta gtaccctgag caagctccag tccagtaaatt ctttccggag 120

atttagagaa gctgctaggg gtgttacgaa acgaattggg aggtctgcat gaattggcag 180

ctaaagtgga tgaatatgct cgtgggtatga tgggtcctct aggtgctact ctttttgaag 240

agcttggggt gtactacata ggcccagt 268

<210> 452
<211> 162
<212> DNA
<213> Glycine max

<400> 452

cttccttggt ggaacatcat ggcttgccg caacagtggc tgatgcacgt ttctgcaagc 60

cattggaccg ttctcttatt cttagccttg cccaatcgca cgaggttttg atcactgtgg 120

aagaagggca ataggaggat tcggatctca tgttggtcag tt 162

<210> 453
<211> 232
<212> DNA
<213> Glycine max

<400> 453

gatctctccg ctctctcatc ataccgcact ctgggtagt tacttctct tccctctcac 60

tctcaatggg gtctccattt cctcgccac gctcaccgcc tccaccagat gaagaaaagg 120

ccatgtgggg tatatgcac cctctccgag agtggagagt attattccca ccgaccgcca 180

actcccctac tagacaccgt caactatcct attcatatga agaattctctc tg 232

<210> 454
<211> 280

<212> DNA
<213> Zea mays

<400> 454

gtgcaccgac caagaaaacc tcgcttcacg atctctacga gctccagggc ctctccccgt 60
ggtatgacaa cctctgccga cctgtcaccg acttgctgcc ccttatcgcc agctgtgttc 120
gtggagtcac cagcaaccct gcagtaatcc tccgtttcca ccttttgttt ctctgcttgc 180
atgggttgctg cgcattcact cctgaccgtg tctctgacgc aatgcagatt ttccagaagg 240
ccatctcatc ctccagcgca tatgatgac agttcaagca 280

<210> 455
<211> 274
<212> DNA
<213> Zea mays

<400> 455

tgacactcaa ggaactgttg aggaggcaaa gtggttacac aaagtggta accgccccaa 60
tgtctacata aagatccctg ctaccgcaga atgtgttcat tccatccgtg aagttatcgc 120
taatggcatt agcgtcaacg tcacgcttat attctctatt gcgagatacg aggctgtgat 180
tgatgcttac cttgatgggc tagaggcttc tggcttgagc gacttatctc gagttaccag 240
tgtcgcatcc ttctttgtca gtcgagtcga cacc 274

<210> 456
<211> 306
<212> DNA
<213> Zea mays

<400> 456

ccaacgagca aaccccccat ttgccaccaa ccccgacgag cggcgatgac cggcacgtgt 60
ctaagctggc ggcgccccgt ccggcggcac cgccgctccg gccggcgtcc ctccgcaccg 120
ccgccctcgc cttcgcccc tccgcgcgcc gggctccgct ctccgtcgcc gggcgagcca 180
ggagccccat cattgcgatg gcttcggcca aggaaggaaa tgggtgcaccg accaagagga 240
ctgcgcttca tgatctctac gagctccagg gcctgtcccc gtggtacgac aacctatgcc 300
gccctg 306

<210> 457
 <211> 330
 <212> DNA
 <213> Zea mays

<400> 457

ccaaggtggg aggcgttggc caagaaaggt gccaaagaaac aaaggttggt gtgggcatcc 60
 accggtgtca agaaccagc ttatcctgac actctttatg tggacagtct catcgacct 120
 gacacggtca acacgatgcc cgaccaagct ttgcaagcat tcatagacca cggcaccgtt 180
 tcaaggacag ttgatgcgaa cgtgtctgag gcggaagggtg tatacagtgc cttggagaag 240
 cttggcatcg actggaaga ggttggaag cagcttgagc tggaaggcgt ggactccttc 300
 aagaagagct ttgacagcct actcgtgagc 330

<210> 458
 <211> 317
 <212> DNA
 <213> Zea mays

<400> 458

gaaattctct ggcccaggt gggaggcgtt ggccaagaaa ggtgccaaga aacagaggtt 60
 gttgtgggca tccaccggtg tcaagaacct agcttatccc gacactcttt acatcgacag 120
 tctcattgga cctgacacgg tcaacacgat gcccagacaa gctttgcacg cattcataga 180
 ccacggcact gtctcgagga cagttgatgc gaatgtgtcc gaggcggaag gtgtatacag 240
 cgccttgag aagcttgga ttgactgggg cgaggctgga aagcagcttg agctggaagg 300
 tgttgactcc ttcaaga 317

<210> 459
 <211> 306
 <212> DNA
 <213> Zea mays

<400> 459

cgggaggcgt tggccaagaa aggtgccaag aaacaaaggt tggtgtgggc atccaccggt 60
 gtcaagaacc cagcttatcc tgacactctt tatgtggaca gtctcatcgg acctgacacg 120
 gtcaacacga tgcccagacca agctttgcaa gcattcatag accacggcac cgtttcaagg 180
 acagttgatg cgaatgtgtc tgaggcgga ggtgtatata gcgccttgga gaagcttggc 240

atcgactggg aagaggttgg aaagcagctt gagctggaga gcgtggactc cttcaagaag 300
agcttt 306

<210> 460
<211> 299
<212> DNA
<213> Zea mays

<400> 460

cttgagcgac ttatctcgag ttaccagtgt cgcacacctt tttgtcagtc gagtcgacac 60
ccttatcgac aaaatgcttg agaagattgg aacacctgag gcacttgcct tgagagggaa 120
ggctgccgtc gcacaggcca aactagcaaa tcggctctac cagaagaaat tctctggccc 180
gaagtgggag gcgttggcca agaaaggtgc caagaaacag aggttgttgt gggcgtccac 240
cggtgtcaag aaccagctt atcccagacac tctttacatc gacagtctca ttggacctg 299

<210> 461
<211> 282
<212> DNA
<213> Zea mays

<400> 461

agcaaatcgg ctctaccaga agaaattctc tggcccaagg tgggaggcgt tggccaagaa 60
aggtgccaag aaacaaaggt tgttgtgggc atccaccggt gtcaagaacc cagcttatcc 120
tgacactctt tatgtggaca gtctcatcgg acctgacacg gtcaacacga tgcccagacca 180
agctttgcaa gcattcatag accacggcac cgtttcaagg acagttgatg cgaacgtgtc 240
tgaggcggaa ggtgtatata gtgccttggga gaagcttggc at 282

<210> 462
<211> 295
<212> DNA
<213> Zea mays

<400> 462

gcgacttata tcgagttacc agtgtcgcat ccttctttgt cagccgagtc gacaccctta 60
tcgacaaaat gcttgagaag attggaacac ctgaggcact tgccttgaga gggaaggctg 120
ccgtcgcaca ggccaaacta gcaaatcggc tctaccagaa gaaattctct ggcccagagt 180

gggaggcggtt ggccaagaaa ggtgccaaga aacagagggtt gttgtgggca tccaccggtg 240
tcaagaaccc agcttatccc gacactcttt acatcgacag tctcattgga cctga 295

<210> 463
<211> 313
<212> DNA
<213> Zea mays

<400> 463

tgaatgtgtt ccttccatcc aggaagttat cgctaattggc attagcgtca acgtcacgct 60
tatttttctca attgcgagat atgaggctgt gattgatgct tacctcgatg ggctagaggc 120
ttctggactt gagtgactta tcccagagta ctagcgttgc atccttcttt gtcagccgag 180
tggacaccct tattgacaaa atgcttgaca agattggaac acctgaggcc cttgccttga 240
gaggaaaggc tgcagtagcg caggccaaac tagcaaatcg gctctaccag aagaaattct 300
ctggcccaag gtg 313

<210> 464
<211> 275
<212> DNA
<213> Zea mays

<400> 464

gaacacctga ggcccttgcc ttgagaggaa aggctgcagt agcacaggcc aaactagcaa 60
atcggctcta ccagaagaaa ttctctggcc caaggtggga ggcgttgcc aagaaagggtg 120
ccaagaaaca aaggttgttg tgggcatcca ccggtgtcaa gaaccagct tatcctgaca 180
ctctttatgt ggacagtctc atcggacctg acacggtcaa cacgatgccc gaccaagctt 240
tgcaagcatt catagaccac ggcaccgttt caagg 275

<210> 465
<211> 286
<212> DNA
<213> Zea mays

<400> 465

cccacgcgtc cgcccacgag tccggtgatt gatgcttacc ttgatgggct agaggcttct 60
ggcttgagcg acttatctcg agttaccagt gtcgcatoct tctttgtcag ccgagtcgac 120

acccttatcg acaaaatgct tgagaagatt ggaacacctg aggcacttgc cttgagaggg 180
aaggctgccg tcgcacaggc caaactagca aatcggctct accagaagaa attctctggc 240
ccgaggtggg aggcgttggc caagaaaggt gccaaagaa agaggt 286

<210> 466
<211> 284
<212> DNA
<213> Zea mays

<400> 466

ctcaaggaac tgttgaagcg gcaaagtggg tacacaaagt ggtcaaccgc cccaatgtct 60
acataaagat ccagctact gcagaatgtg ttccttccat ccaggaagtt atcgctaata 120
gcattagcgt caacgtcacg cttatcttct caattgagag atatgaggct gtgattgatg 180
cttacctga tgggctagag gcttctggct tgagtgaact atcccgagtt actagcgttg 240
catccttctt tgtcagccga gtggacaccc ttattgacaa aatg 284

<210> 467
<211> 277
<212> DNA
<213> Zea mays

<400> 467

aaccgcccc aatgtctacat aaagatccct gctaccgccg aatgtgttcc ttccatccgg 60
gaagttatcg ctaatggcat tagcgtcaac gtcacgctta tttctctat tgcgagatac 120
gaggctgtga ttgatgctta cttgatggg ctagaggctt ctggcttgag cgacttatct 180
cgagttacca gtgtcgcac cttctttgtc agccgagtcg acacccttat cgacaaaatg 240
cttgagaaga ttggaacacc tgaggcactt gccttga 277

<210> 468
<211> 279
<212> DNA
<213> Zea mays

<400> 468

ttttgagcct atctacgatg agaccgatgg ggctgatggg tatgtctccg tggaggtgtc 60
tcttaggttg gcaaatagca ctcaaggaac tgttgaggcc gcaaagtggg tacacaaagt 120

ggccaaccgc cccaatgtct acataaagat ccctgctacc gccgaatgtg ttccttccat 180
 ccgggaagtt atcgctaata gcattagcgt caacgtcacg cttattttct ctattgcgag 240
 atacgaggct gtgattgatg cttaccttga tgggctaga 279

<210> 469
 <211> 334
 <212> DNA
 <213> Zea mays

<400> 469

cggacgcgtg ggtccagcgc atatgatgat cagttcaagc agctcatttc ggctggaaag 60
 gacgcggaga gcgcttactg ggaactcgtt ataaaggata tccaagatgc gtgcaaactt 120
 tttgagccca tctacgatga gactgatggg gctgatgggt atgtctccgt agaggtgtct 180
 cctaggttgg caaatgacac tcaaggaact gttgaagcgg caaagtgggt acacaaagtg 240
 gtcaaccgcc ccaatgtcta cataaagatc ccagctactg cagaatgtgt tccttccatc 300
 caggaagtta tcgctaattg cattagcgtc aacg 334

<210> 470
 <211> 322
 <212> DNA
 <213> Zea mays

<400> 470

tagcagctca tttcggcagg aaaggatgcg gagagcgctt actgggaact cgttataaag 60
 gatatccaag atgcgtgcaa actttttgag cccatctacg acgagactga tggggctgat 120
 gggatatgtct ccgtagaggt gtctcctagg ttggcaaata acactcaagg aactgttgaa 180
 gcggcaaagt ggttacacaa agtgggtcaac cgccccaatg tctacataaa gatcccagct 240
 actgcagaat gtgttccttc catccaggaa gttatcgcta atggcattag cgtcaacgtc 300
 acgcttattt tctcaattgc ga 322

<210> 471
 <211> 283
 <212> DNA
 <213> Zea mays

<400> 471

gttgttgtgg gcatccaccg gtgtcaagaa cccagcttat cccgacactc tttacatcga 60
cagtctcatt ggacctgaca cgggtcaacac gatgcccagc caagctttgc acgcattcat 120
agaccacggc actgtctcga ggacagttga tgcgaatgtg tccgaggcgg aaggtgtata 180
cagcgccttg gagaagcttg gcattgactg gggcgaggtc ggaaagcagc ttgagctgga 240
aggtgtggac tccttcaaga agagctttga cagcctactc gtg 283

<210> 472
<211> 265
<212> DNA
<213> Zea mays

<400> 472

gccttatcga caaaatgctt gagaagattg gaacacctga ggcacttgcc ttgagagggga 60
aggctgccgt cgcacaggcc aaactagcaa atcggctcta ccagaagaaa ttctctggcc 120
cgagggtggga ggcgttggcc aagaaagggtg ccaagaaaca gaggttggtg tgggcatcca 180
ccggtgtcaa gaaccagct tatcccgaca ctctttacat cgacagtctc attggacctg 240
acacggtcaa cacgatgccc gacca 265

<210> 473
<211> 240
<212> DNA
<213> Zea mays

<400> 473

caagattgga acacctgagg cccttgcctt gagaggaaag gctgcagtag cacaggccaa 60
actagcaaat cggtcttacc agaagaaatt ctctggccca aggtgggagg cgttggccaa 120
gaaagggtgcc aagaaacaaa ggttggtgtg ggcattccacc ggtgtcagga acccagctta 180
tcctgacact ctttatgtgg acagtctcat cggacctgac acggtcaaca cgatgcccg 240

<210> 474
<211> 301
<212> DNA
<213> Zea mays

<400> 474

ccgacaaggt ccgggacgcg tggctgggaa ctcggtataa aggatatcca agatgcgtgc 60

aaactttttg agcccatata cgatgagact gatagggctg atgggtatgt ctccgtagag 120
 gtgtctccta ggttggcaaa tgacactcaa ggaactgttg aagcggcaaa gtggttacac 180
 aaagtggtea accgccccaa tgtctacata aagatcccag ctactgcaga atgtgttcct 240
 tccatccagg aagttatcgc taatggcatt agcgtcaacg tcacgcttat tttctcaatt 300
 g 301

<210> 475
 <211> 300
 <212> DNA
 <213> Zea mays

<400> 475

agaggcttct ggcttgagcg acttatctcg agttaccagt gtcgcatact tctttgtcag 60
 ccgagtcgac acccttatcg acaaaatgct tgagaagatt ggaacacctg aggcacttgc 120
 cttgagaggg aaggctgccg tcgcacaggc caaactagca aatcggctct accagaagaa 180
 attctctggc ccgagggtgg aggcgttggc caagaaaggt gccaaagaaac agagggttgtt 240
 gtgggcatcc accggtgtca agaaccacgc ttatcccgac actctttaca tcgacagtct 300

<210> 476
 <211> 267
 <212> DNA
 <213> Zea mays

<400> 476

ggcaaatgac actcaaggaa ctggtgaagc ggcaaagtgg ttacacaaag tggtaaccg 60
 cccaatgtc tacataaaga tcccagctac tgcagaatgt gttccttcca tccaggaagt 120
 tatcgctaata ggcattagcg tcaacgtcac gcttattttc tcaattgcaa gatatgaggc 180
 tgtgattgat gcttacctcg atgggctaga ggcttctggc ttgagtgact tatcccgagt 240
 tactagcgtt gcatccttct ttgtcag 267

<210> 477
 <211> 293
 <212> DNA
 <213> Zea mays

<400> 477

cccacgcgtc cgcccacgcg tccgggaact cgttataaag gatatccaag atgcgtgcaa 60
 actttttgag cccatctacg acgagactga tggggctgat gggatatgtct ccgtagaggt 120
 gtctcctagg ttggcaaagt aactcaagg aactgttgaa gcggcaaagt ggttacacaa 180
 agtgggtcaac cgcccgaatg tctacataaa gatcccagct actgcagaat gtgttccttc 240
 catccaggaa gttatcgcta atggcattag cgtcaacgtc acgcttttct caa 293

<210> 478
 <211> 257
 <212> DNA
 <213> Zea mays

<400> 478

gcgttggcca agaaagggtc caagaaacag aggttgttgt gggcatccac cgggtgcaag 60
 aaccagctt atcgcgacac tctttacatc gacagtctca ttggacctga cacgggtcaac 120
 acgatgcccg accaagcttt gcacgcattc atagaccacg gcaactgtctc gaggacagtt 180
 gatgcgaatg tgtccgaggc ggaagggtga tacagcgctt tggagaagct tggcattgac 240
 tggggcgagg tcggaaa 257

<210> 479
 <211> 229
 <212> DNA
 <213> Zea mays

<400> 479

cccttatcga caaaatgctt gagaagattg gaacacctga ggcacttgcc ttgagagggga 60
 aggctgccgt cgcacaggcc aaactagcaa atcggctcta ccagaagaaa ttctctggcc 120
 cgagggtggga ggcgttggcc aagaaagggtg ccaagaaaca gaggttggtt tgggcgtcca 180
 ccggtgtcaa gaaccagct tatcccgaca ctctttacat cgacagtct 229

<210> 480
 <211> 263
 <212> DNA
 <213> Zea mays

<400> 480

atggggctga tgggtatgtc tccgtagagg tgtctcctag gttggcaa atgacactcaag 60

gaactgttga agcggcaaag tggttacaca aagtgggtcaa ccgccccaat gtctacataa 120
 agatcccagc tactgcagaa tgtgttcctt ccatccagga agttatcgct aatggcatta 180
 gcgtcaacgt cacgcttatt ttctcaattg caagatatga ggctgtgatt gatgcttacc 240
 tcgatgggct agaggcttct ggc 263

<210> 481
 <211> 300
 <212> DNA
 <213> Zea mays

<400> 481

gccaaggaag gaagcgggtgc accgaccaag aggactgcgc ttcgatgatct ctacgagctc 60
 cagggcctgt ccccggtgga cgacaacctt tgccgccctg tcacagactt gctgcccatt 120
 atcgccagcg ggtccgtgga gtcaccagca acccaacgat tttccaaaag gccatttcat 180
 cgtccagcgc atatgatgat cagttcaagc agctcatttc ggccaggaaag gatgcggaga 240
 gcgcttactg ggaactcgtt ataaaggata tccaagatgc gtgcaaactt tttgagccca 300

<210> 482
 <211> 312
 <212> DNA
 <213> Zea mays

<400> 482

tccaaccaag ggttcggaaa gtcaaggcta atttcccca tgtgggaaac cgaggctggg 60
 attgaggcta accttaatgg gcaaaaggct tctggcttga gcgacttatt tcgagttacc 120
 agtgtcgcat ccttctttgt cagtcgagtc gacaccctta tcgacaaaat gcttgagaag 180
 attggaacac ctgaggcact tgccttgaga gggaaggctg ccgtcgcaca ggccaaacta 240
 gcaaatcggc tctaccagaa gaaattctct ggcccgaggt gggaggcggt ggccaagaaa 300
 ggtgccaaga aa 312

<210> 483
 <211> 264
 <212> DNA
 <213> Zea mays

<400> 483

gcaacccaac gattttccaa aaggccattt catcgtccag cgcatatgat gatcagttca 60
 agcagctcat ttccggcagga aaggatgcgg agagcgctta ctgggaactc gttataaagg 120
 atatccaaga tgcgtgcaaa ctttttgagc ccactctacga cgagactgat ggggctgatg 180
 ggtatgtctc cgtagagggtg tctcctaggt tggcaaatga cactcaagga actgttgaag 240
 cggcaaagtg gttacacaaa gtgg 264

<210> 484
 <211> 232
 <212> DNA
 <213> Zea mays

<400> 484

ggtcaacacg atgcccgacc aagctttgca ggcattcata gaccacggca ctgtttcgag 60
 gacagttgat gcgaatgtgt ccgaggcgga aggtgtatac agcgccttgg agaagcttgg 120
 cattgactgg ggcgaggctg gaaagcagct tgagctggaa ggtgtggact ccttcaagaa 180
 gagctttgac agcctactcg tgagcctgca ggagaagggc aactagcctc aa 232

<210> 485
 <211> 258
 <212> DNA
 <213> Zea mays

<400> 485

caaacttttt gagcccatct acgacgagac tgatggggct gatgggtatg tctccgtaga 60
 ggtgtctcct aggttggcaa atgacactca aggaactgtt gaagcggcaa agtggttaca 120
 caaagtggtc aaccgccccca atgtctacat aaagatccca gctactgcag aatgtgttcc 180
 ttccatccag gaagttatcg ctaatggcat tagcgtcaac gtcacgctta ttttctcaat 240
 tgcgagatat gaggctgt 258

<210> 486
 <211> 328
 <212> DNA
 <213> Zea mays

<400> 486

aaagtggtta cacaaagtgg tcaaccgccc caatgtctac ataaagatcc ctgctaccgc 60

cgaatgtgtt cattccatcc gtgaagttat cgctaagtc attagcgtca acgtcacgct 120
tattttctct attgcgagat acgaggctgt gattgatgct taccttgatg ggctagaggc 180
ttctggcttg agcgacttat ctcgagttac cagtgtcgca tccttctttg tcagtcgagt 240
cgacaccctt atcgacaaaa tgttgagaag atggaacacc tgaggcattg ccttgagagg 300
gaagggtgccg tcgcacagcc aactagca 328

<210> 487
<211> 274
<212> DNA
<213> Zea mays

<400> 487

cccacgcgtc cggtcaccga cttgctgccc cttatcgcca gcggtgttcg tggagtcacc 60
agcaaccctg caattttcca gaaggccatc tcatectcca gcgcatatga tgatcagttc 120
aagcagctca tttcgggcgg aaaggacgcg gagagcgctt actgggaact tgttataaag 180
gatatccaag acgcgtgcag tctttttgag cctatctacg atgagaccga tggggctgat 240
gggtatgtct ccgtggaggt gtctcctagg ttgg 274

<210> 488
<211> 213
<212> DNA
<213> Zea mays

<400> 488

cggacggtgg gcgacaaaat gcttgagaag attggaacac ctgaggcact tgccttgaga 60
gggaaggctg agcgtcgcac aggccaaact agcaaatacg ctctaccaga agaaattctc 120
tggcccagagg tgggagggcgt tggccaagaa aggtgccaaag aaacagaggt tgttgtgggc 180
gtccaccggt gtcaagaacc cagcttatcc cga 213

<210> 489
<211> 262
<212> DNA
<213> Zea mays

<400> 489

tttcatcgtc cagcgcatat gatgatcagt tcaagcagct catttcggct ggaaaggacg 60

cggagagcgc ttactgggaa ctcgttataa aggatatcca agatgcgtgc aaactttttg 120
agcccatcta cgatgagact gatggggctg atgggtatgt ctccgtagag gtgtctccta 180
ggttggcaaa tgacactcaa ggaactgttg aagcggcaaa gtggttacac aaagtgtca 240
accgccccaa tgtctacata aa 262

<210> 490
<211> 252
<212> DNA
<213> Zea mays

<400> 490

cgatggggct gatgggtatg tctccgtgga ggtgtctcct aggttggcaa atgacactca 60
aggaactgtt gaggcggcaa agtgggttaca caaagtggtc aaccgcccc aatgtctacat 120
aaagatccct gctaccgccg aatgtgttcc ttccatccgg gaagttatcg ctaatggcat 180
tagcgtcaac gtcacgctta ttttctctat tgcgacatac gaggtgtga ttgatgctta 240
ccttgatggg ct 252

<210> 491
<211> 239
<212> DNA
<213> Zea mays

<400> 491

cagcaaccca acgatatttcc aaaaggccat ttcacgtcc agcgcataatg atgatcagtt 60
caagcagctc atttcggctg gaaaggacgc ggagagcgt tactgggaac tcgttataaa 120
ggatatccaa gatgcgtgca aactttttga gccatctac gatgagactg atggggctga 180
tgggtatgtc tccgtagagg tgtctcctag gttggcaaat gacactcaag gaactgttg 239

<210> 492
<211> 196
<212> DNA
<213> Zea mays

<400> 492

gaaaggtgcc aagaaacaaa ggttgttgtg ggcatccacc ggtgtcaaga acccagctta 60
tcttgacact ctttatgtgg acagtctcat cggacctgac acggtcaaca cgatgccga 120

ccaagctttg caagcattca tagaccacgg caccgtttca aggacagttg atgcgaacgt 180
gtctgaggcg gaaggt 196

<210> 493
<211> 355
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 493

atctctacga gctccagggc ctgtcaccgt ggtacgacaa cctatgccgc cctgtcacag 60
acttgctgcc cattatcgcc agcgaggtcc gtggagtcac cagcaatcca acgattttcc 120
anaaggccat ttcacgtcc agcgcatatg atgatcagtt caagcagctc atttcggctg 180
gaaaggacgc ggagagcgct tactgggaac tcgttataaa ggatatccaa gatgcgtgca 240
aactttttga gcccatctac gatgagactg atggggctga tgggtatgtc tccgtagagg 300
tgtctcctag gttggcaaat gacactcaag gaactgttga agcggcatag tggtt 355

<210> 494
<211> 270
<212> DNA
<213> Zea mays

<400> 494

gactagttct agatcgccag cggcgtccgt ggagtcacca gcaacccaac gattttccaa 60
aaggccattt catcgtccag cgcatatgat gatcagttca agcagctcat ttcggcagga 120
aaggatgcgg agagcgctta ctgggaactc gttataaagg atatccaaga tgcgtgcaaa 180
ctttttgagc ccatctacga cgagactgat ggggctgatg ggtatgtctc cgtagaggtg 240
tctcctaggt tggcaaatga cactcaagga 270

<210> 495
<211> 226
<212> DNA
<213> Zea mays

<400> 495

gacgcggaga gcgcttactg ggaactcgtt ataaaggata tccaagatgc gtgcaaactt 60

tttgagccca tctacgatga gactgatggg gctgatgggt atgtctccgt agaggtgtct 120
 cctaggttgg caaatgacac tcaaggaact gttgaagcgg caaagtgggt acacaaagtg 180
 gtcaaccgcc ccaatgtcta cataaagatc ccagctactg cagaat 226

<210> 496
 <211> 234
 <212> DNA
 <213> Zea mays

<400> 496

cccacgcgtc cgcccacgcg tccgggaaag gatgcggaga gcgcttactg ggaactcgtt 60
 ataaaggata tccaagatgc gtgcaaactt tttgagccca tctacgacga gactgatggg 120
 gctgatgggt atgtctccgt agaggtgtct cctaggttgg caaatgacac tcaaggaact 180
 gttgaagcgg caaagtgggt acacaaagtg gtcaaccgcc ccaatgtcta cata 234

<210> 497
 <211> 313
 <212> DNA
 <213> Zea mays

<400> 497

ccgagtcgcg gtttccgtcg ccgggcgagc caggagcccc atcattgcga tggttcggc 60
 caaggaagga agcgggtgcac cgaccaagag gactgcgctt catgatctct acgagctcca 120
 gggcctgtcc ccgtggtacg acaacctatg ccgccctgtc acagacttgc tgcccattat 180
 cgccagcggc gtccgtggag tcaccagcaa cccaacgatt ttccaaaagg ccatttcac 240
 gtccagcgca tatgatgatc agttcaagca gctcatttcg gcaggaaagg atgcggagag 300
 cgcttactgg gaa 313

<210> 498
 <211> 243
 <212> DNA
 <213> Zea mays

<400> 498

ggatatgcaa gatgcgtgca aactttttga gcccatctat gacgagactg atggggctga 60
 tgggtatgtc tccgtagagg ggtctcctag gttggctaata gacactcaat gtactgttga 120

agctgcaaag tggttacaca aagttgtcaa cgcgcccaat gtctacataa agatcccagc 180
 tactgcagaa tgtgttcctt ccatccagga agttatccct aatggcatta gcgtcaacgt 240
 cac 243

<210> 499
 <211> 281
 <212> DNA
 <213> Zea mays

<400> 499

cacgcttatt ttctctattg cgacatacga ggctgtgatt gatgcttacc ttgatgggct 60
 agaagcttcg ggcttgagcg acttatctcg agttaccagt gtcgcatcct tctttgtcag 120
 ccgagtcgac acccttatcg acaaaatgct gaaaatattg gaacacctga ggcacttgcc 180
 ttgagagggga aggctgccgt cgcacaggcc aaactagcaa atcggctcta ccagaagaaa 240
 ttctctggcc caaggtggga ggcgttggcc aagaaagggtg c 281

<210> 500
 <211> 320
 <212> DNA
 <213> Zea mays

<400> 500

gtctcgagga cagttccgtg gtctatgaat gcgtgcaaag cttggtcggg catcgtgttg 60
 accacggcac tgtctcgagg acagttgatg cgaatgtgtc cgatgcggaa cgtgtataca 120
 gcgccttggga gaatcttggc attgactggg gcgatgtcgg aaagcagctt gagctggaag 180
 gtgtggactc cttcaagaag agctttgaca gcctactcgt gaggctacag gagaatggca 240
 acagcctcaa gacggcaact gtgtaaaact gagaagattg ggtagcggcg ggtgaacgat 300
 tttactatat aaaatgctag 320

<210> 501
 <211> 318
 <212> DNA
 <213> Zea mays

<400> 501

tgttggccaa gcaagagtgc caacgaaaca gcacgttcgc ttagcgcacat cccttggtgt 60

ccagaaccca gcttgtcccg cgactaccta catcgacagt ctcatggggc ctgacacggt 120
 caacacgatg cccgaccaag ctttgcacgc attcatagac cacggcactg tctcgaggac 180
 agttgatgcg aatgtgtccg aggcggaagg tgtatacagc gccttggaga agcttggcat 240
 tgactcgggc gaggtcgga agcagcttga gctggaaggt gtggactctt caagcagact 300
 ttgacagcct actcgtga 318

<210> 502
 <211> 283
 <212> DNA
 <213> Zea mays

<400> 502

cagacgcgtg ggggccgctg ctccgtcgcc gggcgagcca ggagcccat cattgcgatg 60
 gcttcggcca aggacgaaa tgggtgcaccg accaagagga ctgcgcttca tgatctctac 120
 gagctccagg gcctgtcccc gtggtacgac aacctatgcc gccctgtcac agacttctgtg 180
 cccattatcg ccagcggcgt ccgtggagtc accagcaacc caacgatttt ccaaaaggcc 240
 atttcatcgt ccagcgcata tgatgatcag ttcaagcagc tca 283

<210> 503
 <211> 275
 <212> DNA
 <213> Zea mays

<400> 503

atctcatcct ccagcgcata tgatggttat ctggaccatt gcaggggtgc tgggtgactcc 60
 acgaacaccg ctattttcca gaaggtcatc tcctctcca gcgcataatga tgatcagttc 120
 aagcagctca tttcgggcgg aaatgacgag gagagtgtt actgcgaact tgttatacag 180
 gatatccaag acgcgtgcag tctttttgag cctatctacg atgagaccga tggggctgat 240
 ggggtatgtct ccgtggaggt gtctcctagg ttggc 275

<210> 504
 <211> 184
 <212> DNA
 <213> Zea mays

<400> 504

accagcaacc ctacaatddd ccagaaggcc atctcatcct ccagcgcata tgatgatcag 60
 ttcaagcagc tcatttcggg cggaaaggac gcggagagcg cttactggga actcgttata 120
 aaggatatcc aagacgcgtg cagtcttdttt gagcctatct acgatgagac cgatggggct 180
 gatg 184

<210> 505
 <211> 262
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 505

cccacgcgtc cgatgtgtct gaggcggaag gtgtatacag cgccttggag aagcttggca 60
 tcgactggga agaggttggga aagcagcttg agctggaagg cgtggactcc ttcaagaaga 120
 gctttgacag cctactcgtg agcctgcagg agaagggcaa cagcctcaag atggcgagtg 180
 tgtaaagctg agaagattgg gtacctgcga gtgaacgatt ttactanata naatgctagc 240
 ttgctggctc tcctcttagt tt 262

<210> 506
 <211> 291
 <212> DNA
 <213> Zea mays
 <400> 506

cggctcgagg tttcaaggac agttgatgcg aacgtgtctg aggcggaagg tgtatacagt 60
 gccttggaga agcttggcat cgactgggaa gaggttggaa agcagcttga gctggaaggc 120
 gtggactcct tcaagaagag ctttgacagc ctactcgtga gcctgcagga gaagggcaac 180
 agcctcaaga tggcgagtgt gtaaagctga gaagattggg tacctgcgag tgaacgattt 240
 tactaaataa aatgctagct tgctggctct cctcttagtt tttacgctgt a 291

<210> 507
 <211> 244
 <212> DNA
 <213> Zea mays
 <400> 507

aaggcggaag gtgtatacag cgccttggag aagcttggca ttgactgggc cgaggtcgga 60

aagcagcttg agctggaagg tgtggactcc ttcaagaaga gctttgacag cctactcgtg 120
 agcctgcagg agaagggcaa cagcctcaag acggcaactg tgtaaaactg agaagattgg 180
 gtaccggcgg gtgaacgatt ttactaaata aaatgctagc ttgctggctc tcctaatttt 240
 tacg 244

<210> 508
 <211> 298
 <212> DNA
 <213> Zea mays
 <400> 508

tgccaacgtg tctgaggcgg aaggtgtata cagtgccttg gagaagcttg gcatcgactg 60
 ggaagaggtt ggaaagcagc ttgagctgga aggcgtggac tccttcaaga agagctttga 120
 cagcctactc gtgagcctgc aggagaagg caacagcctc aagatggcga gtgtgtcaag 180
 ctgagaagat tgggtacctg cgagtgaacg attttactaa ataaaatgct agcttgctag 240
 ctctcctctt agtttttacg ctgtaccttt gctctcaatt ttctgagtcg gctttgta 298

<210> 509
 <211> 241
 <212> DNA
 <213> Zea mays
 <400> 509

gcagaatgtg ttccttccat ccaggaagtt atcgctaata gcattagcgt caacgtcacg 60
 cttattttct caattgcaag atatgaggct gtgattgatg cttacctcga tgggctagag 120
 gcttctggct tgagtgaatt atccccgagtt actagcgttg catccttctt tgtcagccga 180
 gtggacaccc ttattgacaa aatgcttgac aagattggaa cacctgaggc ccttgccttg 240
 a 241

<210> 510
 <211> 139
 <212> DNA
 <213> Zea mays
 <400> 510

caagacgcgt gcagcttttt tgagcctatc tacgatgaga ccgatggggc tgatgggtat 60

gtctccgtgg aggtgtctcc taggttggca aatgacactc aaggaactgt tgaggccgca 120
aagtggttac acaaagtgg 139

<210> 511
<211> 170
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 511

cggcactgtc tcgaggacag ttgatgcgaa tgtgcccgac gcggaaggtg tatacagcgc 60
cttgagaag cttggcattg actgggccga ggtcggaaag cagcttgagc tggaaggtgt 120
ggactccttc acagagagca ttgacangct actcgtgagc ctgcaggaga 170

<210> 512
<211> 169
<212> DNA
<213> Zea mays
<400> 512

ctcgatgggc tagaggcttc tggcttgagt gacttatccc gagttactag cgttgcatcc 60
ttctttgtca gccgagtga cacccttatt gacaaaatgc ttgacaagat tggaacacct 120
gaggcccttg ccttgagagg aaaggctgca gtagcgcagg ccaaactag 169

<210> 513
<211> 259
<212> DNA
<213> Zea mays
<400> 513

gcgccttga gaagcttggc attgactggg gcgaggtcgg aaagcagctt gagctggaag 60
gtgtggactc cttcaagaag acgcggtgac agcctactcg tgagcctaca ggagaagggc 120
aacagcctca agacggcaac tgtgtaaaac tgagaagatt gggtagcggc gggtagaaca 180
cattactaaa taaaatgcta gcttgctggc tctcttagtt tttagatgt acctttgctc 240
tccattttct gaatcgga 259

<210> 514

<211> 216
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 514

ggaaagcagc ttgagctgga aggcgtggac tccttcaaga agagctttga cagcctactc 60
 gtgagcctgc aggagaaggg caacagcctc aagatggcga gtgtgtaaag ctgagaagat 120
 tgggtacctg cgagtgaacg attttactaa atanaatgct agcttgctgg ctctcctctt 180
 agtttttacg ctgtactttg ctctcaattt tctgag 216

<210> 515
 <211> 291
 <212> DNA
 <213> Zea mays

<400> 515

catcgactgg gaagaggttg gaaagcagct tgagctggaa ggcgtggact ccttcaagaa 60
 gagctttgac agcctactcg tgagcctgca ggagaagggc aacagcctca agatggcgag 120
 tgtgtaaagc tgagaagatt gggtaacctg gagtgaacga ttttactaaa taaaatgcta 180
 gcttgctggc tctcctctta gtttttacgc tgtacctttg ctctcaattt tctgagtcgg 240
 ctttgtatcc cagcttgcca gaacgtcatg tgtagccatg ttcattggctg t 291

<210> 516
 <211> 260
 <212> DNA
 <213> Zea mays

<400> 516

gcgtggactc cttcaagaag agctttgaca gcctactcgt gagcctgcag gagaagggca 60
 acagcctcaa gatggcgagt gtgtaaagct gagaagattg ggtacctgcg agtgaacgat 120
 tttactaaat aaaatgctag cttgctggct ctctcttag tttttacgct gtacctttgc 180
 tctcaatttt ctgaatcggc tttgtatccc aggccttgcca gaacgtcatt gtgtagccac 240
 tgttcatggc ttgtaattgc 260

<210> 517
 <211> 327

<212> DNA
<213> Zea mays

<400> 517

cgacggaaat agatgctcgg ttagcttatg acaccaggg cataatccac agggtacatg 60
aactgttgaa tctatacaac caacatgatg tctcaactga ccgcctgtta ttcaaaattc 120
ctgctacatg gcaaggcata gaggcctcaa gggtgcttga atctgaagga attcaaacgc 180
atctatcatt tgtttacagt ttgcgacaag cggcagcggc agcacaagct ggtgcatctg 240
tagtacaat gtttgtgggc cgattgcggg actgggcagg catcactctg gtgaccaga 300
gatagatgaa gctttgaaga atggaga 327

<210> 518
<211> 203
<212> DNA
<213> Zea mays

<400> 518

cagggcataa tccacaggtt acatgaactg ttgaatctat acaaccaaca tgatgtctca 60
actgaccgcc tgttattcaa aattcctgct acatggcaag gcatagaggc ctcaagggtg 120
cttgaatctg aaggaattca aacgcatcta acatttgttt acagtttcgc acaagcggca 180
gggtcagcac aagctggtgc atc 203

<210> 519
<211> 268
<212> DNA
<213> Zea mays

<400> 519

cctcaagggt gcttgaatct gaaggaattc aaacgcatct aacatttggt tacagtttcg 60
cacaagcgag cacggcagca caagctggtg catctgtagt acaaatgttt gtaggccgat 120
tgcgggactg ggcaaggcat cactctggtg acccagagat agatgaagct ttgaagaatg 180
gagaagatgc tgggctttct ttggcgaaga aagtatatgc ctatattcac aggaatgggt 240
acaaaacaaa gctgatggcc gctgcat 268

<210> 520
<211> 417

<212> DNA
<213> Zea mays

<400> 520

ggaacacctg aggcccttgc cttgagagga aaggctgcag tagcgcaggc cagactggca 60
aatcggtctt ggcagaagaa attctctggc ccaaggtggg aggcgttggc caagaaaggt 120
gccaaagaaac aaaggttggt gtgggcatcc accggtgtca agaaccagc ttatcctgac 180
actctttatg tggacagtct catcggacct gacacggtca acacgatgcc cgaccaagct 240
ttgcaagcat tcatagacca cggcaccgtt tcaaggacag ttgatgcgaa tgtgtctgaa 300
gcggaaggtg tatacagcgc cttggagaag cttggcatcg actgggaaga ggttggaag 360
cagcttgagc tggaaggcgt ggactccttc aagaagagct ttgacagcct actcgtg 417

<210> 521
<211> 424
<212> DNA
<213> Zea mays

<400> 521

aatcggtctt accagaagaa attctctggc ccgaggtggg aggcgttggc caagaaaggt 60
gccatgaaac agaggttggt gtgggcggtc accggtgtca agaaccagc ttatcccgac 120
actctttaca tcgactgtct cattggacct gacactgtca acacgatgcc cgaccaagct 180
ttgcaggcat tcatagacca cggcactggt tcgaggacag ttgatgcgaa tgtgtacgag 240
gcggaaggtg tatacagcgc cttggacaat cttggcattg actggcgaga ggtcagaaaag 300
cagcttgagc tggaaggtgt ggactccttc atgaagagct ttgacagcct actcgtgagc 360
ctgcaggaga tgggtcaacat cctcaagacg gcatctgtgt aaaactgaga agattgtgta 420
ccgg 424

<210> 522
<211> 443
<212> DNA
<213> Zea mays

<400> 522

atttcggctg gaaaggacgc ggagagcgt tactgggaac tcgttataaa ggatatccag 60
gatgcgtgca aactttttga gcccatctac gatgagactg atggggctga tgggtatgtc 120

tccgtagagg tgtctcctag gttggcaaat gacactcaag gaactgttga agcggcaaag 180
 tggttacaca aagtgggtcaa ccgccccaat gtctacataa agatcccagc tactgcagaa 240
 tgtgttcctt ccatccagga agttatcgct aatggcatta gcgtcaacgt cagcgttatt 300
 ttctcaattg caagatatga ggctgtgatt gatgcttacc tcgatgggct agaggcttct 360
 ggcttgagtg acttatcccc agttactagc gttgcatcct tctttgtcag ccgagtggac 420
 acccttattg acaaaatgct tga 443

<210> 523
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 523

gccagcggcg tccgtggagt caccttctac ccaacgattt tccaaaaggc catttgagtc 60
 gtccagcgca tatgatgagc agttcaagca gtcatttcg gcaggaaagg atgcggagag 120
 cgcttactgg gaactcgta taaaggatat ccaagatgcg tgcaaacttt ttgagcccat 180
 ctacgacgag actgatgggg ctgatgggta tgtctccgta gaggtgtctc ctaggttggc 240
 aaatgacact caaggaactg ttgaagcggc aaagtgggta cacaaagtgg tcaaccgccc 300
 caatgtctac ataaagatcc cagctactgc agaatgtgtt ccttccatcc aggaagttat 360
 cgctaattggc attagcgtca acgtcacgct tatnntctca attgcgagat atgaggctgt 420
 gattgatgct tacctcga 438

<210> 524
 <211> 369
 <212> DNA
 <213> Zea mays
 <400> 524

gcgagatacg aggctgtgat tgatgcttac cttgatgggc tagaggctgg tggcttgagc 60
 gacttatott gagttaccag cgtcgcatgc ttctttgtca gtcgagtcta cacccttate 120
 gacaaaatgc ttgagaagat tggaacacct gaggcacttg ccttgagagg gaaggctgcc 180
 gacgtacagg ccaaactagc aaatcggctc taccagaaga aattctctgg cccgaggtgg 240

gaagcgtctg ccaagaaagg tgccaagaaa cagatgttgt tgcgggcgtt caccctgtgc 300
 aagaaccag cttatcccgga cactctttac atcgacagtc ttattggacc tgacacggtc 360
 aacacgatt 369

<210> 525
 <211> 375
 <212> DNA
 <213> Zea mays

<400> 525

tgcttacctc gatgggctag aggcttctgg cttgagtgac ttatcccgag ttactagcgt 60
 tgcgtccttc tttgtcagcc gagtggacac cttattgac aaaatgcttg acaagattgg 120
 aacacctgag gcccttgctt tgagaggaaa ggctgcagta gcacaggcca aactagcaaa 180
 tcggctctac cagaagaaat tctctggccc aagggtgggag gcgttggcca agaaaggtgc 240
 caagaaacaa aggttgttgt gggcatccac cggtgtcaag aaccagctt atcctgacac 300
 tctggatgtg gacagtctca tctgacctga cacgttcaac acgatgcccg accaagcttt 360
 gcaagcattt catag 375

<210> 526
 <211> 389
 <212> DNA
 <213> Zea mays

<400> 526

cccacgcgtc cgctgcgctt catgatctct acgagctcca gggcctgtcc ccgtggtacg 60
 agaacctatg ccgccctgtc acagacttgc tgcccattat cgccagcggc gtccgtggag 120
 tcaccagcaa cccaacgatt ttccaaaagg ccatttcacg gtccagcgca tatgatgatc 180
 agttcaagca gctcatttcg gcaggaaagg atgcggagag cgcttactgg gaactcgtta 240
 taaaggatat ccaagatgcg tgcaaaactt ttgagcccat ctacgacgag actgatgggg 300
 ctgatgggta tgtctccgta gaggtgtctc ctaggttggc aaatgacact caaggaactg 360
 ttgaagcggc aaagtgggta cacaaagtg 389

<210> 527
 <211> 379
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 527

aatcggtctt accagaagaa attctctggc ccgaggtggg aggcgttggc cgagaagggt 60

gcatgaaac agaggttgtt gtgggcgtcc accggtgtca agaaccagc ttatcccagc 120

actctctaca tcgacagcct cattggacct gacacggtca aactatgcc cgtacaagct 180

ttgcatgcat tcatagacca cggcactgtt tcgaggacag ttgatgctaa tgtgtacgag 240

gcggaagggtg tatacagcgc cttggagaag cttggcattg actgnngcga ggtcggaaag 300

caacttgagc tggaagggtgt ggactccttc aagaagagct ttgacagcct actcgtgagc 360

ctgcatgaga agggcaaca 379

<210> 528

<211> 185

<212> DNA

<213> Zea mays

<400> 528

aggcctgtcc ccgtggtacg acaacctatg ccgccctgtc acagacttgc tgcccattat 60

cgccagcggc gtccgtggag tcaccagcaa cccaacgatt ttccaaaagg ccatttcac 120

gtccagcgca tatgatgatc agttcaagca gctcatttcg gcaggaaagg atgcggagag 180

cgcta 185

<210> 529

<211> 374

<212> DNA

<213> Zea mays

<400> 529

gaggtacgag tacgcgaaca cgatgcccga ccaagctttt caagcattca tagaccactg 60

caccgtttca aggacagttg atgcgaatgt gtctgaggcg gaaggtgtat acagcgcctt 120

ggagaagctt ggcacgact gggaacaggt tggaaagcag cttgagctgg aacgcgtgga 180

ctccttcaag aagagctttg acagcctact cgtgagcctg caggacaagg gcaacagtct 240

caagatggcg agtgtgtaaa gctgataaga ttgggtacct gccagtgaac gattttacta 300

aataaaatgc tagcttgctg gctcttctct tactatttac gctgtacctt tgctctcaat 360

tatctgaatc ggct

374

<210> 530
<211> 348
<212> DNA
<213> Zea mays

<400> 530

gtctcaactg accgcctggt attcataatt cctgctacat ggcaaggcat agaggcctca 60
aggttgcttg aatctgaagg aattcaaacg catctaacat ttgtttacag tttcgcacta 120
aagcggcagc ggcagcacia gctggtgcat ctgtagtaca aatgtttgtg ggccgattgc 180
gggactgggc aaggcatcac tctggtgacc cagagataga tgaagctttg aagaatggag 240
aagatgctgg gctttctttg gcgaagaaag tatatgccta tattcacagg aatgggtaca 300
aaacaaagct gatggccgct gccataccga acaagcagga cgtattta 348

<210> 531
<211> 525
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 531

gggggggtggg gttgactgtc atgttcgcgt ggcggtacaa agtcgaaatt gnccggggcca 60
cccacgcaac cgcctcgcga ccgcaaagc ccgcgacttt cagcctacgg aggccacatc 120
tggccgcgcg ggccgcccgt ggcaacgcac ccacgtcccc ggtccgcgag gtcgtcactg 180
agtcgcacgc ggtcgcgggc ttcagcgaga tcgtgccgga caccgtcgtg ttcgatgatt 240
tcgagagggt cgcacccacg gcggccacag tgagctcgtc gctgctgctt gggatcactg 300
ggctcccaga cactaagtgc aagagtgcga tagatactgc actggcagat ggtgagtgc 360
acgcactgga gaaggctgat gacatgatgt cctgttacct caccaaggct cttgcatatg 420
ttggcgctga actggctcat caagtccttg ggagagtttc gacggaaata gatgctcgg 480
tagcttatga caccagggc ataatccaca gggatcatga actgt 525

<210> 532
<211> 423
<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 532

agagcctcca aaacctcgca acaaccccgt gacacccaca cccatccgcc ctgcgcctcc 60
tcgcgctccc caccaacccc gacgagcggc gatgaccggc acggtgtcca agctggcggc 120
gccccggcct gcggcgccac cgctccggcc ggcgtccctc cgcgccgccg caatcgcttt 180
cgccccctcc ccgcgccggg tccgcgtctc cgtcgccggg cgggccagga tccccctcgt 240
cattgcgatg gcttctgcca aggaaggaaa tgggtgaccg accaagaaaa cctcgcttca 300
cgatctctac gagctccagg gcctctcccc gtggtatgac aacctctgcc gacctgtcac 360
cgacttgctg ccccttatcg ccagcgggtg tcgtggagtc accagcaacc ctgcaattnt 420
cca 423

<210> 533

<211> 429

<212> DNA

<213> Zea mays

<400> 533

cggacgcgtg ggagcctcca aaacctcgca acaaccccgt gacacccaca cccatccgcc 60
ctgccccctcc tcgcgctccc caccaacccc gacgagcggc gatgaccggc acggtgtcca 120
agctggcggc gccccggcct gcggcgccac cgctccggcc ggcgtccctc cgcgccgccg 180
caatcgcttt cgccccctcc ccgcgccggg tccgcgtctc cgtcgccggg cgggccagga 240
tccccctcgt cattgcgatg gcttctgcca aggaaggaaa tgggtgaccg accaagaaaa 300
cctcgcttca cgatctctac gagctccagg gcctctcccc gtggtatgac aacctctgcc 360
gacctgtcac cgacttgctt gcccttatcg gcagcgggtg tcgtggagtc accagcaacc 420
ctacaattt 429

<210> 534

<211> 283

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 534

ctcttgggaa tatgtggcct tccanacacc attttttagga atgctgtgga aatggcttag 60
 ctgattctga gtgttatgga cttgaaaatc ctaacgcgcg attgtcttgt tttgtcaaca 120
 aggcttttcgc gaatatcggg agtgacatgg caaagcttgt ccctggccgt gtttcgacag 180
 aagtggatgc gcggcttgcg tatgacacac atgccattat caggaagggtg catgacctgt 240
 tgaagttgta catgatannt atgtacctcc gcaacgtctg ttg 283

<210> 535
 <211> 250
 <212> DNA
 <213> Glycine max

<400> 535

agtggaact ctcatgaca aggcccttga gaaaattggc accccagatg ctcttaactct 60
 acgtgggaag gtaactgttt attgttttcc aaactaattt ctattcttgg ctttggattt 120
 attacacttt caaatgtcaa atatgctctt cggattgcat attgaatttt acaggcagca 180
 gtagcccaag cagcattggc ttaccagctc taccaaagga aattttctgg tcaaagtggg 240
 aactctaagt 250

<210> 536
 <211> 333
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 536

tgtttgatag aaataatgga tcggaacggg ccaaagatca naagtacaat tcttcaccat 60
 ctctatgata agcagagaca gagcccttac tatgacaatc tctgtcgccc tgtttcagat 120
 ttgcttccat ttattgcaa tgggatcaga ggtgtcacta ccaaccagc ggtactcact 180
 actcagtttt ttcttcacct gaaaacatta ctcttctcca tttggtttta tttttatcta 240
 gtttctgtgt gttggttata ataacttttc agtgttctca catcgagat ttttgaaaga 300
 gctatttcat cctcaaagtc ctacgatgat cag 333

<210> 537
 <211> 280
 <212> DNA
 <213> Glycine max

<400> 537

ggacaccctc attgacaagg cccttgagaa aattggcacc ccagtggccc ttaatctacg 60
cggaaggca gcggtagccc aagcagcatt ggcttaccag ctctacaaa ggaaattttc 120
tggtccaagg tgggaagctc tagttaaaaa gggggccaag aagcaaaggc tcctctgggc 180
ctcaaccagt gtaaagaatc ctgcctattc tgacacctta tatgttgctc ctcttattgg 240
acccgacact gtatcaacaa tgccagacca agcccttcaa 280

<210> 538

<211> 294

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 538

gtgttgctc tttctttgtc agtagagtgg acactctcca ttgacaaggc ccttgagaaa 60
attggcacc cagaggctct taatctacgt gggaaggcag cagtagccca agcagcattg 120
gcttaccacc totaccaaag gaaattttct ggtccaaggt gggaagctct agttaaaaag 180
ggggccaaga agcaaaggct ctttgggcct caaccagtgt aaagaaccct gcctattctg 240
acacntatat gttgctcctc tattggaccc gacatgatca accagccaga ccaa 294

<210> 539

<211> 221

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 539

gtagagtgga caccctcatt gacaaggccc ttgagnaaat tggcaccoca gtggccctta 60
atctacgcg gaaggcagcg gtagcccaag cagcattggc ttaccagctc taccaaagga 120
aattttctgg tccaagggtg gaagctctag ttaaaaaggg ggccaagaag caaaggctcc 180
tctgggcctc aaccagtgtg aagaatcctg cctattctga c 221

<210> 540

<211> 299

<212> DNA

<213> Glycine max

<400> 540

tattctcagt ttgcggtggt tgatagaaat aatggatcgg aacggggccaa agatcaaaaag 60
tacaattctt caccatctct atgagaagca gagacagagc ccttactatg acaatctctg 120
tcgccctggt tcagggtttgc ttccatttat tgccaatggg atcagaggtg tcactaccaa 180
cccagcgatt ttgaaagag ctatttcac ctc aaatgcc tacgatgatc agttgagggg 240
attggtaggg gcagggaagg acatagaaa tgcttattgg gaattggttg tgaaggaca 299

<210> 541

<211> 240

<212> DNA

<213> Glycine max

<400> 541

gaagcagaga cagagccctt actatgacaa tctctgtcgc cctgtttcag atttgcttcc 60
atttattgcc aatgggatca gaggtgtcac taccaaccca gcgatttttg aaagagctat 120
ttcatcctca aaatgctacg atgatcagtt gagggaaatg gtcaggggcca ggaaggacat 180
agaaagtgct tattgggaat tggttgtaaa ggacatacag gatacttgca aacttctgga 240

<210> 542

<211> 278

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 542

tttcaattgc tctctctttg ctcttatccc ttttcctttn tctncttttc ctttgggttt 60
tctattctca gtttgcggtg tttgatagaa ataatggatc ggaaccggcc aaagatcaaa 120
agtacaattc ttcacatct ctatgagaag cagagacaga gcccttacta tgacaatctc 180
tgtcgccctg tttcagattt gcttccattt attgccaatg ggatcagagg tgtcactacc 240
aaccagcga tttttganag agctatttca tcttcaag 278

<210> 543

<211> 254

<212> DNA

<213> Glycine max

<400> 543

atctttcttt tttcttcttt tcctttgggt tttctattct cagtttgagg tgtttgatag 60
aaataatgga tcggaacggg ccaaagatca aaagtacaat tcttcacat ctctatgaga 120
agcagagaca gagcccttac atgacaatct ctgtcgccct gtttcagatt tgcttccatt 180
tattgccaat gggatcagag gtgtcactac caaccagcg atttttgaaa gagctatttc 240
atcctcaaat gcct 254

<210> 544

<211> 236

<212> DNA

<213> Glycine max

<400> 544

caagaagcaa aggctccttt gggcctcaac cagtgtaaag aacctgcct attctgacac 60
cttatatggt gtcctcttta ttggaccoga cactgtatca accatgccag accaagccct 120
tcaagcattt attgatcatg gtaccgtatc caggacaata gactcaaag catctgaagc 180
tgaaggaata tacaatgctc tccagaaatt gggatttgac tggagctttg ttgggt 236

<210> 545

<211> 260

<212> DNA

<213> Glycine max

<400> 545

ggctcctttg ggcctcaacc agtgtaaaga acctgccta ttctgacacc ttatatgttg 60
ctcctcttat tggaccogac actgtatcaa ccatgccaga ccaagccctt caagcattta 120
ttgatcatgg taccgtatcc aggacaatag actcaatgca tctgaagctg aaggaatata 180
caatgctctc cagaaattgg gtattgactg gagctttgtt ggttcccagc ttgaacttga 240
aggagtggac tcgtttaaga 260

<210> 546

<211> 250

<212> DNA

<213> Glycine max

<400> 546

gaaggaatat acaatgctct ccagaaattg ggtattgact ggagctttgt tggttcccag 60
 cttgaacttg aaggagtga ctcgtttaag aagagctttg acagcctcct ggattctctg 120
 caagagaagg caaactctct taagttggtc agccattgaa gtgtgaacgt catagttagt 180
 aatgcagtgc tatgtatgaa gtgatttatg gattaataaa aggcagtggc tgtgcatttt 240
 gtgctgctgt 250

<210> 547
 <211> 265
 <212> DNA
 <213> Glycine max

<400> 547

ctcgagccgg gaatatacaa tgctctccag aaattgggta ttgactggag ctttgttgga 60
 ctcccagctt gaacttgaag gagtggactc gtttaagaag agctttgaca gcctcctgga 120
 ttctctgcaa gagaaggcaa actctcttaa gttggtcagc cactgaagtt tgaacgtcat 180
 ggtagtaat gcagtgctgt gtatgatggc atctatggat taataaaagg cagcggctgt 240
 gcattttgtg ctgctgcaaa tgtgc 265

<210> 548
 <211> 228
 <212> DNA
 <213> Glycine max

<400> 548

cgatcatggtt gctcctctta ttggacccga cactgtatca accatgccag accaagccct 60
 tcaagcattt attgatcatg gtaccgtatc caggacaata gactcaaattg tgcttcatgg 120
 agtcatttat ttagacgata gtgatacaat gtaaattggga aaaattgtcc gcttcaagtc 180
 aagcgttttg ttttttcccc actatacaat ggttgtgcgt ttatgttt 228

<210> 549
 <211> 224
 <212> DNA
 <213> Glycine max

<400> 549

cgtcatggat gctcctctta ttggacccga cactgtatca accatgccag accaagccct 60

tcaagcattt attgatcatg gtaccgtatc caggacaata gactcaaatg tgcttcatgg 120
 agtcatttat ttagacgata gtgatacaat gtacttggga aaaattgtcc gcttcaagtc 180
 aagcgttttg ttttttcccc actatacaat ggttgtgcga ttat 224

<210> 550
 <211> 238
 <212> DNA
 <213> Glycine max

<400> 550

gatcaaatgc tcccaaacag atgggaatgg aagtcctgca aagaggacag tgcttcatga 60
 tctttatgag aaagaagggc agagtccatg gtatgataat ctctgcagac ctgttacaga 120
 ccttcttctt cttatagcaa gtggtgtcag aggcgtcact agcaaccctg cgatttttca 180
 gaaagctatc tcatcatcga atgcttacia tgatcagttc agggaacttg tgcaagca 238

<210> 551
 <211> 269
 <212> DNA
 <213> Glycine max

<400> 551

ggaatggaag tcctgcaaag aggacagtgc ttcattgatct ttatgagaaa gaagggcaga 60
 gtccatggta tgataatctc tgcagacctg ttacagacct gcttctcttt atagcaagtg 120
 gtgtcagagg cgtcactagc aaccctgcga tctttcagaa agctatctca tcacgaatg 180
 cttacaatga tcagttcagg gaacttgtgc aaacagggaa agacattgaa agtgcatatt 240
 gggaacttgt agtgaaggat atccaagat 269

<210> 552
 <211> 272
 <212> DNA
 <213> Glycine max

<400> 552

aattaacctc tccgcttccc tccgatccat tcaactccctc cctcttaaaa cctccttgcg 60
 gatcaaatgc tcccaaacag atgggaatgg aagtcctgca aagaggacag tgcttcatga 120
 tctttatgag aaagaagggc agagtccatg gtatgataat ctctgcagac ctgttacaga 180

ccttcttctt cttatagcaa gtggtgtcag aggcgtcact agcaaccctg cgatttttca 240
gaaagctatc tcattcatga atgcttataa tg 272

<210> 553
<211> 231
<212> DNA
<213> Glycine max

<400> 553

gtcctctctt aaaacctcct tacggatcaa atgctcccaa acagatggga atggaagtcc 60
tgcaaagagg acagtgtctt atgatcttta tgagaaagaa gggcagagtc catggtatga 120
taatctctgc agacctgtta cagacctgct tctctttata gcaagtgggtg tcagaggcgt 180
cactagcaac cctgcgatct ttcagaaagc tatctcatca tcgaatgctt a 231

<210> 554
<211> 237
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 554

tacaaaatta acctctccgc ttccacnga tccattcact cactcnntct taaaantctc 60
ttncggatca aatgctccca aacagatggg aatggaagtc ctgcaaagag gacagtgtct 120
catgatcttt atgagaaaga acngcagagt ccatggtatg ataatctctg cagacctgtt 180
acagaccttc ttctctttat agcaagtggg gtcagaggng tcactagcaa ccctgng 237

<210> 555
<211> 270
<212> DNA
<213> Glycine max

<400> 555

taaaactaac ctatccgctt ccctccgata cattcactcg ctccctctta aaacctcctt 60
acggatcaaa tgctcccaa cagatgggaa tggaagtctg caaagaggac agtgcttcat 120
gatctttatg agaaagaagg gagagtccat ggtatgataa tctctgcaga cctgttacag 180
actgcttctc ttatagcaag tgggtgtcaga ggcgtcatta gcaacctgcg catctttcag 240
aaagctatct catcatcgaa tgttacatga 270

<210> 556
 <211> 292
 <212> DNA
 <213> Glycine max

<400> 556

ccattttcaa gctctcaacg ccattctccag ctgcttcctt atcagaagcg ctcgccccca 60
 gagattctcg ctctctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
 tctccgcttc cctccgatcc attcactccc tcctctttaa aacctccttg cggatcaaata 180
 gctcccaaac agatgggaat ggaagtcctg caaagaggac agtgcttcat gatctttatg 240
 agaaagaagg gcagagtcca tggatgata atctctgcag acctgttaca ga 292

<210> 557
 <211> 165
 <212> DNA
 <213> Glycine max

<400> 557

caaaattaac ctctccgctt cctccgatc cattcactcc ctccctctta aaacctcctt 60
 gcggatcaaa tgctcccaaa cagatgggaa tggaagtcct gcaaagagga cagtgttca 120
 tgatctttat gagaaagaag ggcagagtcc atggtatgat aatct 165

<210> 558
 <211> 289
 <212> DNA
 <213> Glycine max

<400> 558

cattttcaag ctctcaacgc catctccagc tgcttcctta tcagaagcgc ttcgccccag 60
 agattctcgc ttctctctct tcaatccttc ttccaacgct attaattaca aaattaacct 120
 ctccgcttcc ctccgatcca ttactccct cctctttaa acctccttgc ggatcacctg 180
 ctcccaaaca gatgggaatg gaagtcctgc aaagaggaca gtgcttcatg atctttatga 240
 gaaagaaggg cagagtccat ggtatgataa tctctgcaga cctgttaca 289

<210> 559
 <211> 275

<212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 559

ccatTTTcaa gctctcaacg ccatctccag ctgcttcctt atcagangcg cttcgcccca 60
 gagattctcg ctctctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
 tctccgcttc cctccgatcc attcactccc tccctcttaa aacctccttg cggatcaaatt 180
 gctcccaaac agatgggaat ggaagtcctg caaagaggac agtgcttcat gatctttatg 240
 aganagaagg gcagagtcca tggatatgata atctc 275

<210> 560
 <211> 274
 <212> DNA
 <213> Glycine max
 <400> 560

atTTTcaagc tctcaacgcc atctccagct gcttccttat cagaagcgct tcgccccaga 60
 gattctcgct tctctcctt caatccttct tccaacgcta ttaattacaa aattaacctc 120
 tccgcttccc tccgatccat tcaactcctc ctcttaaaac ctcttgagg atcaaattgct 180
 cccaaacaga tgggaatgga agtcctgcaa agaggacagt gcttcatgat ctttatgaga 240
 aagaagggca gagtccatgg tatgataatc tctg 274

<210> 561
 <211> 270
 <212> DNA
 <213> Glycine max
 <400> 561

ccatTTTcaa gctctcaacg ccatctccag ctgcttcctt atcagaagcg cttcgcccca 60
 gagattctcg ctctctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
 tctccgcttc cctccgatca ttcaactcct cctctctaaa acctccttgc ggatcaaattg 180
 ctcccaaaca gatgggaattg gaagtcctgc aaagaggaca gtgcttcatg atctttatga 240
 gaaagaaggg cagagtccat ggtatgataa 270

<210> 562

<211> 265
 <212> DNA
 <213> Glycine max

<400> 562

cgctccatt ttcaagctct caacgccatc tccagctgct tccttatcag aagcgcttcg 60
 cccagagat tctcgcttcc tctccttcaa tcttcttcc aacgctatta attacaaaat 120
 taacctctcc gcttccctcc gatccattca ctccctccct cttaaaacct ccttgcgcat 180
 caaatgctcc caaacagatg ggaatggaag tctgcaaag aggacagtgc ttcgatgatct 240
 ttatgagaaa gaagggcaga gtcca 265

<210> 563
 <211> 261
 <212> DNA
 <213> Glycine max

<400> 563

atattcaagc tctcaacgcc atctccagct gcttccttat cagaagcgct tcgccccaga 60
 gattctcgct tctctcctt caatccttct tccaacgcta ttaattacaa aattaacctc 120
 tccgcttccc tccgatccat tcactccctc cctcttaaaa cctccttgcg gatcaaatgc 180
 tcccaaacag atgggaatgg aagtcctgca aagaggacag tgcttcatga tctttatgag 240
 aaagaagggc agagtccatg g 261

<210> 564
 <211> 282
 <212> DNA
 <213> Glycine max

<400> 564

tccattttca agctctcaac gccatctcca gctgcttctt tatcataagc gcttcgcccc 60
 agagattctc gcttcctctc cttcaatcct tcttccaacg ctattaatta cacaattaac 120
 ctctccgctt ccctccgata cattcaactcc ctccctctta aaacctcctt gcggatcaaa 180
 tgctcccaaa cagatgggaa tggaagtctt gcaaagagga cagtgcctca tgatctttat 240
 gagaaagaag ggcagagtcc atggtatgat aatctctgca ga 282

<210> 565

<211> 290
 <212> DNA
 <213> Glycine max

<400> 565

tccgcttcgt gacttgcagc aattcccaat ggcttcggtt tccaagctct caacgccaaa 60
 tccacttgct tccttatcag aagcgcttcg cccccgagat tctcgcttcc tcaccttcaa 120
 acctttctcc atcgctttta atcacaaaac taacctatcc gcttccttcc gatccattca 180
 ctcgctccct cttaaaacct ccttacggat caaatgctcc caaacagatg ggaatggaag 240
 tcctgcaaag aggacagtgc ttcatgatct ttatgagaaa gaagggcaga 290

<210> 566
 <211> 256
 <212> DNA
 <213> Glycine max

<400> 566

ccattttcaa gctctcaacg ccattctccag ctgcttcctt atcagaagcg cttcgcccca 60
 gagattctcg cttcctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
 tctccgcttc cctccgatcc attcactccc tccctcttaa aacctccttg cggatcaaatt 180
 gctcccaaac agatgggaat ggaagtcctg caaagaggac agtgcttcat gatctttatg 240
 agaaagaagg gcagag 256

<210> 567
 <211> 271
 <212> DNA
 <213> Glycine max

<400> 567

gcttcgtgac ttgcagcaat tccaatggc ttccgtttcc aagctctcaa cgccaaatcc 60
 acttgcttcc ttatcagaag cgcttcgccc ccgagattct cgcttcctca ccttcaaacc 120
 ttcttccatc gcttttaate aaaaaactaa cctatccgct tccctccgat ccattcactc 180
 gctccctctt aaaacctcct tacggatcaa atgctcccaa acagatggga atggaagtcc 240
 tgcaaagagg acagtgttcc atgatcttta t 271

<210> 568

<211> 284
 <212> DNA
 <213> Glycine max

<400> 568

tacttggtgt cttgcaattc ccaatggcct ccattttcaa gctctcaacg ccattctccag 60
 ctgcttcctt atcagaagcg cttcgccccca gagattctcg ctctctctcc ttcaatcctt 120
 cttccaacgc tattaattac aaaattaacc tctccgcttc cctccgatcc attcactccc 180
 tccctcttaa aacctccttg cggatcaaag gctcccaaac agatgggaat ggaagtcctg 240
 caaagaggac agtgcttcat gatctttatg agaaagaagg gcag 284

<210> 569
 <211> 264
 <212> DNA
 <213> Glycine max

<400> 569

ctgacttgca gcaattccca atggcttccg tttccaagct ctcaacgcca aatccacttg 60
 ctctcttata agaagcgctt cgccccgag attctcgctt cctcaccttc aaaccttctt 120
 ccattcgctt taatcacaaa actaacctat ccgcttccct ccgatccatt cactcgctcc 180
 ctcttaaaac ctcttacgg atcaaagct cccaaacaga tgggaatgga agtcctgcaa 240
 agaggacatg ctcatgatc ttta 264

<210> 570
 <211> 250
 <212> DNA
 <213> Glycine max

<400> 570

caatggcctc cattttcaag ctctcaacgc catctccagc tgcttcctta tcagaagcgc 60
 ttgccccag agattctcgc ttctctctct tcaatccttc ttccaacgct attaattaca 120
 aaattaacct ctccgcttcc ctccgatcca ttactccct ccctcttaaa acctccttgc 180
 ggatcaaag ctcccaaaca gatgggaatg gaagtcctgc aaagaggaca gtgcttcatg 240
 atctttatga 250

<210> 571

<211> 272
 <212> DNA
 <213> Glycine max

<400> 571

ctcgagccga gcaattccca atggcttccg tttccaagct ctcaacgcc aatccacttg 60
 cttccttata agaagcgctt cgccccagag attctcgctt cctcaccttc aaacctactc 120
 ccatcgcttt taatcacaaa actaacctat ccgcttccct ccgatccatt cactcgctcc 180
 ctcttaaaac ctctttacgg atcaaatgct cccaaacaga tgggaatgga agtcctgcaa 240
 cgaggacagt gtttcatgat ctttatgaga aa 272

<210> 572
 <211> 272
 <212> DNA
 <213> Glycine max

<400> 572

cgcttcgtga cttgcagcaa ttcccaatgg cttccgtttc caagctctca acgccaaatc 60
 cacttgcttc cttatcagaa gcgcttcgcc ccgagattc tcgcttcttc accttcaaac 120
 cttcttccat cgcttttaac cacaaaacta acctatccgc ttccctccga tccattcact 180
 cgctccctct taaaacctcc ttacggatca aatgctccca aacagatggg aatggaagtc 240
 ctgcaaagag gacagtgctt catgatcttt at 272

<210> 573
 <211> 237
 <212> DNA
 <213> Glycine max

<400> 573

ctcaacgcc a tctccagctg cttccttata agaagcgctt cgccccagag attctcgctt 60
 cctctccttc aatccttctt ccaacgctat taattacaaa attaacctct ccgcttccct 120
 ccgatccatt cactccctcc ctcttaaaac ctcttgccg atcaaatgct cccaaacaga 180
 tgggaatgga agtcctgcaa agaggacagt gtttcatgat ctttatgaga aagaagg 237

<210> 574
 <211> 251
 <212> DNA

<213> Glycine max

<400> 574

ccattttcaa gctctcaacg ccatctccag ctgcttcctt atcagaagcg cttcgcccca 60
gagattctcg cttcctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
tctccgcttc cctccgatcc attcactccc tccctcttaa aacctccttg cggatcaaatt 180
gctcccaaac agatgggaat ggaagtcctg caaagaggac agtgcttcat gatctttatg 240
agaaagaagg g 251

<210> 575

<211> 233

<212> DNA

<213> Glycine max

<400> 575

ctgacttgca gcaattccca atggcttccg tttccaagct ctcaacgcca aatccacttg 60
cttccttate agaagcgctt cgcccccgag attctcgctt cctcaccttc aaaccttact 120
ccatcgcttt taatcacaaa actaacctat ccgcttccct ccgatccatt cactcgctcc 180
ctcttaaaac ctccttacgg atcaaatgct cccaaacaga tgggaatgga agt 233

<210> 576

<211> 279

<212> DNA

<213> Glycine max

<400> 576

ccattttcaa gctctcaacg ccatctccag ctgcttcctt atcagaagcg cttcgcccca 60
gagattctcg cttcctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
tctccgcttc cctccgatcc attcactccc tccctcttaa aacctccttg cggatcaaatt 180
gctcccaaac agatgggaat ggaagtcctg caaagaggac agtgcttcat gatctttatg 240
agaaagacgg gcagagtcca tggatatgatc atctctgca 279

<210> 577

<211> 244

<212> DNA

<213> Glycine max

<400> 577

ccattttcaa gctctcaacg ccattctccag ctgcttcctt atcagaagcg cttcgcccca 60
gagattctcg ctctctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
tctccgcttc ctccgatcca ttcaactcct cctctttaa acctccttg cgatcaaag 180
ctcccaaaca gatgggaatg gaagtctgc aaagaggaca gtgcttcag atctttatga 240
gaaa 244

<210> 578

<211> 249

<212> DNA

<213> Glycine max

<400> 578

caagctctca acgccatctc cagctgcttc cttatcagaa gcgcttcgcc ccagagattc 60
tcgcttcctc tccttcaatc cttcttccaa cgctattaat tacaaaatta acctctccgc 120
ttccctccga tccattcact cctccctct taaaacctcc ttgcggatca aatgctccca 180
aacagatggg aatggaagtc ctgcaaagag gacagtgcct catgatcttt atgagaaaga 240
gggcagagt 249

<210> 579

<211> 245

<212> DNA

<213> Glycine max

<400> 579

ccattttcaa gctctcaacg ccattctccag ctgcttcctt atcagaagcg cttcgcccca 60
gagattctcg ctctctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
tctccgcttc cctccgatcc attcaactcc tccctcttaa aacctccttg cgatcaaag 180
gctcccaaac agatgggaat ggaagtctg caaagaggac agtgcttcag gatctttatg 240
agaaa 245

<210> 580

<211> 293

<212> DNA

<213> Glycine max

<400> 580

gctatctcat catcgaatgc ttacaatgat cagttcaggg aacttggtgca aacagggaaa 60
gacattgaaa gtgcatattg ggaacttgta gtgaaggata tccaagatgc ttgcagacta 120
tttgaaccaa tctatgatca aacagatggg ggtgatggta tgtttctgtt gaagtatctc 180
ctaggctcgc tgatgacact gagggaaacca tagaagctgc aaaatggctt cataaagtgg 240
ttgatcgccc caatgtgtat attaagattc ctgctacaga ggcatgtgtg cct 293

<210> 581

<211> 271

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 581

cgacctgctt cctcttatag caagtgggtg cagangcgtc actagcaacc ctgcgatctt 60
tcagaaagct atctcatcat cgaatgctta caatgatcag ttcagggaac ttgtgcaaac 120
agggaaagac attgaaagtg catattggga acttgtagtg aaggatatcc aagatgcttg 180
cagactatth gaaccaatct atgatcaaac agatgggtgg gatgggtatg tttctgtnga 240
agtatctcct aggctcgctg atgacactga g 271

<210> 582

<211> 274

<212> DNA

<213> Glycine max

<400> 582

ctagatgctt gcaaattatt tgaaccaatc tatgatcaaa cagatgggtg tgatggctat 60
gtttctgttg aagtatctcc caggctcgct gatgacactg aggaaccat agaagctgca 120
aatggcttc ataaagtggg tgatcgcccc aatgtgtata ttaagattcc tgctacagag 180
gcatgtgtgc cttcaattaa ggaagttatt gctaattgga taagtgtgaa tgtgacgctg 240
atattctctc ttgcaagata tgaagctgta atag 274

<210> 583

<211> 267

<212> DNA

<213> Glycine max

<400> 583

aagacattga aagtgcataat tgggaacttg tagtgaagga tatccaagat gcttgcaa 60
tatttgaacc aatctatgat caaacagatg gtggtgatgg ctatgtttct gttgaagtat 120
ctcccaggct cgctgatgac actgaggga ccatagaagc tgcaaaatgg cttcataaag 180
tggttgatcg cccaatgtg tatattaaga ttctgctac agaggcatgt gtgccttcaa 240
ttaaggacgt tattgctaataa gggataa 267

<210> 584

<211> 248

<212> DNA

<213> Glycine max

<400> 584

agaaagtgca tattgggaac ttgtagtgaa ggatatccaa gatgcttgca gactatttga 60
accaatctat gatcaaacag atggtggtga tgggtatggt tctgttgaag tatctcctag 120
gctcgctgat gacactgagg gaaccataga agctgcaaaa tggcttcata aagtgggtga 180
tcgccccaat gtgtatatta agattcctgc tacagaggca tgtgtgcctt caattaagga 240
agttattg 248

<210> 585

<211> 253

<212> DNA

<213> Glycine max

<400> 585

gcgattactc agaaagctat ctcatcatcg actccttaca atgatcagtt cagggaactt 60
ctgcaagcag ggaaagacat tgaaagtgca tattgggaac ttgtagtgaa ggatatccaa 120
gatgcttgca aattatttga accaatctat gatcaaacag atggtggtga tggctatggt 180
tctgttgaag tatctcccag gctcgctgat gaacctgagg gaaccatagc agctgcaaaa 240
tggcttcata aag 253

<210> 586

<211> 253

<212> DNA

<213> Glycine max

<400> 586

gaagctgcaa aatggcttca taaagtgggt gatcgcccca atgtgtatat taagattcct 60
gctacagagg catgtgtgcc ttcaattaag gaagttattg ctaatgggat aagtgtgaat 120
gtgacgctga tattctctct tgcaagatat gaagctgtaa ttgatgcata cttggatgggt 180
cttgaggcat ctgagttaaa tgacctctct agagttacaa gtgttgccctc tttcttcgtc 240
agtagagtgg aca 253

<210> 587

<211> 264

<212> DNA

<213> Glycine max

<400> 587

ctcgagccta agacattgaa agtgcataatt gggaacttgt agtgaaggat atccaagatg 60
cctgcagact atttgaacca atctatgata aacagatgg tggatgagg tatgtttctg 120
ttgaagtatc tcctaggctc gctgatgaca ctgagggaac cattgaagct gcaaaatggc 180
ttcataaagg gttgatcgcc ccaatgtgta tattaagatt cctgctacag aggcattgtg 240
gccttcaatt aaggaagtta ttgc 264

<210> 588

<211> 263

<212> DNA

<213> Glycine max

<400> 588

ctgatattct ctcttgcaag atatgaagct gtaatagatg cttacttgga tggctcttgag 60
gcatctgggt taaatgacct ctctagagtt acaagtgttg cctctttctt tgtcagtaga 120
gtggacactc tcattgaaag gcccttgaga aaattggcac ccagaggct cttaatctac 180
gtgggaaggc agcagtagcc caagcagcat tggcttacca gctctaccaa aggaaatttt 240
ctggtccaag gtgggaagct cta 263

<210> 589

<211> 244

<212> DNA

<213> Glycine max

<400> 589

gggataagtg tgaatgtgac gctgatattc tctcttgcaa gatatgaagc tgtaatagat 60
gcttacttgg atggtcttga ggcattctggg ttaaattgacc tctctagagt tacaagtgtt 120
gcctctttct ttgtcagtag agtggacact ctcattgaca aggcccttga gaaaattggc 180
acccagagg ctcttaattct acgtgggaag gcagcagtag cccaagcagc attggcttac 240
cagc 244

<210> 590

<211> 228

<212> DNA

<213> Glycine max

<400> 590

gottacaatg atcagttcag ggaacttgtg caaacagga aagacattga aagtgcata 60
tgggaacttg tagtgaagga tatccaagat gcttgacagc tatttgaacc aatctatgat 120
caaacagatg gtggtgatgg gtatgtttct gttgaagtat ctctaggct cgctgatgac 180
actgagggaa ccatagaagc tgcaaaatgg cttcataaag tggttgat 228

<210> 591

<211> 265

<212> DNA

<213> Glycine max

<400> 591

catagaagct gcaaaatggc ttcataaagt ggttgatcgc cccaatgtgt atattaagat 60
tcctgctaca gaggcatttg tgccttcaat taaggaagtt attgctaagc ggataagtgt 120
gaatgtgacg ctgatattct ctcttgcaag atatgaagct gtaatagatg cttacttggc 180
tggctcttgag gcatctgggt taaatgacct ctctagagtt acaagtgttg cctctcactt 240
tgtcagtaga gtggacactc tcatt 265

<210> 592

<211> 281

<212> DNA

<213> Glycine max

<400> 592

cctcgagccg attcggtctg agcgaatgct tacaatgac agttcaacgg aacttgtgca 60
aacagggaaa gacattgaaa gtacatattg ggaacttgta gtgaaggata tccaagatgc 120
ttgcagacta tttgaaccaa tctatgatca aacagatggt ggtgatgggt atgtttctgt 180
tgaagtatct cctaggctcg ctgatgacac tgagggaacc atagaagctg caaaatggct 240
tcataaagtg gttgatcgcc ccaatgtgta tattaagatt c 281

<210> 593
<211> 281
<212> DNA
<213> Glycine max
<223> unsure at all n locations
<400> 593

catcatcgaa tgcttaaaat gntcagttca ggnnacttgt gnnaacaggg aaagacattg 60
aaagtgcata ttgggaactt gtagtgaagg atatcnaaaa tgcnaaaaan gananttga 120
accaatctat gancaaacag atgngngtga tgggtatggt tctgttgaag tatctcctag 180
ggctcgctga tgaacactga gggaaccata gaagctgcaa aatggcttca taaagtggnt 240
gatcggccca atgtgtatat taagattcct gnttacagag g 281

<210> 594
<211> 260
<212> DNA
<213> Glycine max
<400> 594

gccttcaatt aaggaagtta ttgctaattg gataagtgtg aatgtgacgc tgatattctc 60
tcttgcaaga tatgacgctg taatagatgc ttacttggat ggtcttgagg catctggggt 120
aaatgacctc tctagagtta caagtgttgc ctctttcttt gtcagtagag tggacactct 180
cattgacaag gcccttgaga aaattggcac cccagaggct cttaatctac gtgggaaggc 240
agcagtagcc caagcagcat 260

<210> 595
<211> 217
<212> DNA
<213> Glycine max

<400> 595

gaagttattg ctaatgggat aagtgtgaat gtgacgctga tattctctct tgcaagatat 60
gaagctgtaa ttgatgcata cttggatggt cttgaggcat ctgagttaaa tgacctctct 120
agagttacaa gtgttgccctc tttcttcgtc agtagagtgg acaccctcat tgacaaggcc 180
cttgagaaaa ttggcacccc agtggccctt aatctac 217

<210> 596

<211> 212

<212> DNA

<213> Glycine max

<400> 596

ctatgatcaa acagatgggtg ctgatggcta tgtttctggt gaactatctc ccaggctcgc 60
tgatgacact gaggaacca tagaagctgc aaaatggctt cataaagtggt ttgatcgccc 120
caatgtgtat attaagattc ctgctacaga ggcattgtgtg cttcaatta aggaagttat 180
tgctaattggg ataagtgtga atgtgacgct ga 212

<210> 597

<211> 289

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 597

ttatagcaag tnngtgtcag ancgctcact ngcaaccctg cgatttttca gaaaggctan 60
cgcatcatcg aaggnttaacn atgatcngtt cagggaaactt ggtgcaagca gggaaagaca 120
ttgaaagtgc atattgggaa ctngtagtga aggatatcca agatgcttgc aaattatttg 180
aaccantcta tnatcaaaca gatgggtggtg atggctatgt ttctgttgaa gtatctccca 240
ggctcgctga tgacactgag gganccatag aactgcaaaa tggcttcat 289

<210> 598

<211> 260

<212> DNA

<213> Glycine max

<400> 598

gtgaatgtga cgctgatatt ctctcttgca agatatgaag ctgtaattga tgcatacttg 60

gatggtcttg aggcattctga gttaaagac ctctctagag ttacaagtgt tgcctctttc 120
 ttcgctcagta gaggggacac cctcattgac aaggcccttg agaaaattgg caccctcagt 180
 gcccttaatc tacgcgggaa ggcagcggta gcccaagcag cattggctta ccagctctac 240
 caaaggaaat tttctggtcc 260

<210> 599
 <211> 229
 <212> DNA
 <213> Glycine max
 <400> 599

taaggaagtt attgctaattg gactaagtgt gaatgtgacg ctgatattct ctcttgcaag 60
 atatgaagct gtaattgatg catacttgga tggctctgag gcatctgagt taaatgacct 120
 ctctagagtt acaagtgttg cctctttctt cgtcagtaga gtggacaccc tcattgacaa 180
 ggcccttgag gaaattggca cccagtggc ccttaatcta cgcgggaag 229

<210> 600
 <211> 182
 <212> DNA
 <213> Glycine max
 <400> 600

agtgtgaatg tgacgtgat attctctctt gcaagatatg aagctgtaat ttttgcgata 60
 ctggatggc ttgaggcatc tgagttaaatt gacctctcta gagttacaag tgttgacctt 120
 ttcttcgtca gtagagtga caccctcatt gacaaggccc ttgagaaaat tggcacccca 180
 gt 182

<210> 601
 <211> 399
 <212> DNA
 <213> Glycine max
 <400> 601

gatgaatcca tctcttccat gaaggaggc atttctttgg ggataagtgt aaatgccact 60
 ctcatattct gcctccctaa atatgaagca gtgattgatg cttacttgga tggccttgag 120
 tcttgggca tgactgatct ctctaaggtt tcaagtgcag cagcattcta catcagtaga 180

gtggatgtta cacttgacaa gaaacttgag caaattggta ctactgaggc tcttgatctc 240
aaaggaaaagg gtgcggttgc tcaagcagtc ttagcatacc aactttacca gaaaaaattt 300
tctgggtccaa gatgggaacg cttgggagaat agaagtgcc aagaagcagag gttgatgtgg 360
gcttcaacaa atgtgaaaaa tccatcttac cctgacaca 399

<210> 602
<211> 405
<212> DNA
<213> Glycine max
<223> unsure at all n locations
<400> 602

gtcttgaggc atctgggtta aatgacctct ctagagttac aagtgttgcc tctttcttcg 60
tcagtagaat ggacaccctc attgacaagg cccttgagaa aattggcacc ccaatggccc 120
ttaatctacg tgggaaggca acggtagccc aagcagcatt ggcttaacag ctctacccaaa 180
gaaatcttct ggtccaaagt gggaagctct agttaaaaag ggggccaaga agcaaaggct 240
cctctggggc ttaaccagtg taaagaatcc tgcctattct gacaccttat atgttgctcc 300
tcttattgga cccgacactg tatcaacaat gccagaccaa gcccttcaag catttatcga 360
tcatggtacc gtatccagga caatagactc anatgcatct gaagc 405

<210> 603
<211> 399
<212> DNA
<213> Glycine max
<400> 603

gaacggggcca aagatcaaaa gtacaattct tcaccatctc tatgagaagc agagacagag 60
cccttactat gacaatctct gtgcgcctgt ttcagatttg cttccattta ttgccaatgg 120
gatcagaggt gtcactacca acccagcgat ttttgaaaga gctatttcat cctcaaagtc 180
ctacgatgat cagttgaggg aattggtagg ggcaggggaag gacatagaaa gtgcttattg 240
ggaattggtt gtgaaggaca tacaggatac ttgcaaactt ctggagccaa ttacaatga 300
aacagatggg gaagatggac atgtatctct tgcagtttcc ccaaagctag caaatgacac 360
caaggggaca attgaggcag caaatggct tcataatat 399

<210> 604
 <211> 418
 <212> DNA
 <213> Glycine max

 <223> unsure at all n locations
 <400> 604

cccacgcgtc cggcccttca agcatttatt gatcatggta ccgtatccag gacaatagac 60
 tcaaattgcat ctgaagctga aggaatatac aatgctctcc agaaattggg tattgactgg 120
 agctttgttg gttcccagct tgaacttgaa ggagtggact cgtttaagaa gagctttgac 180
 agcctcctgg attctctgca agagaaggca aactctctta agttggtcag ccaactgaagt 240
 ttgaacgtca tggtagtaa tgcagtgtg tgtatgatgg catctatgga ttaataaaaag 300
 gcagcggctg tgcattttgt gctgctgcan atgtgcttca tggagtcatt tatttagacg 360
 atagtgatac aatgtaaattg ggaaaaattg tccgcttcaa gtcaagcgtt ttgttttt 418

<210> 605
 <211> 396
 <212> DNA
 <213> Glycine max

 <400> 605

atctccagct gcttccttat cagaagcgtc tcgccccaga gattctcgct tctctcctt 60
 caatccttct tccaacgcta ttaattacaa aattaacctc tccgcttccc tccgatccat 120
 tcaactccctc cctcttaaaa cctccttgcg gatcaaattgc tccaaacaga tgggaatgaa 180
 gtcctgcaaa gaggacagtg cttcatgata tttatgagaa agaagggcag agtccatggg 240
 atgataatct ctgcagacct gttacagacc ttcttcctct tatagcaagt ggtgtcagag 300
 gcgtcactag caacctgcg atttttcaga aagctatctc atcatcgaat gcttacaatg 360
 atcagttcag ggaacttggt caagcaggga aagaca 396

<210> 606
 <211> 428
 <212> DNA
 <213> Glycine max

 <400> 606

ccattttcaa gctctcaacg ccatctccag ctgcttcctt atcagaagcg cttcgcccga 60

gaggttctcg cttcctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
 tctccgcttc cctccgatcc attcaactccc tccctcttaa aacctccttg cggatcaaatt 180
 gctcccaaac agatgggaat ggaagtcctg caaagaggac agtgcttcat gatctttatg 240
 agaaagatag gcagagtcca tggatgata atctctgcag acctgttaca gaccttctta 300
 ctcttatagc aagtgggtgc agaggcgtca ctagcaaccc tgcgattttt cagaaagcta 360
 tctcatcatc gaatgcttac aatgatcagt tcaaggaact tgtgcaagca tggaaagaca 420
 ttgaaagt 428

<210> 607
 <211> 373
 <212> DNA
 <213> Glycine max

gaggttctcg cttcctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120

<400> 607
 aacgccatct ccagctgctg ccttatcaga agcgtctcgc cccagagatt ctgcttagt 60
 ctgcttcaat ccttatgcc aagctatcaa ttacaaaatt gacctctccg cttgcctccg 120
 atccattcac tccctgccta ttaaaacctt cttgcggatc aaatgctccc aaacagatgg 180
 gaatggaagt cctgctaaga ggacagcgtc tcatgatctt tatgagaaag aagggcagag 240
 tccatgggat gataatctct gcagacctgt tacagagctt gtctctgtta tagcacgtgg 300
 tgtcagaggc gtcactagca accctgcgat ttttcagaaa gctatctcat catcgaatgc 360
 ttacaatgat cag 373

<210> 608
 <211> 405
 <212> DNA
 <213> Glycine max

<400> 608
 gcaattccca atggcctcca ttttcaagct ctcaacgcca tctccagctg cttccttate 60
 agaagcgctt cgccccagag attctcgctt cctctccttc aatccttctt ccaacgotat 120
 taattacaaa attaacctct ccgcttccot ccgatccatt cactccctcc ctotaaaaac 180
 ctcttgcgg atcaaatgct cccaaacaga tgggaatgga agtcttgcaa agaggacagt 240
 gcttcatgat ctttatgaga aagaaaggca gagtccatgg tatgataatc totgcagacc 300

tgttacagac cttcttcctc ttatagcaag tgggtgtcaga ggcgtcacta gcaaccctgc 360
gatttttcag aaagctatct catcatcgaa tgcttacaat gatca 405

<210> 609
<211> 417
<212> DNA
<213> Glycine max

<400> 609

agtacggctg cgagaagacg acagaagggg gaaccaccta cttggtgtct tgcaattccc 60
aatggcctcc attttcaagc tctcaacgcc atctccagct gcttccttat cagaagcgct 120
tcgccccaga gattctcgct tctctcctt caatccttct tccaacgcta ttaattacaa 180
aattaacctc tccgcttccc tccgatccat tcaactcctc cctcttaaaa cctccttgcg 240
gatcaaatgc tcccaaacag atgggaatgg aagtctgca aagaggacag tgcttcatga 300
tctttatgag aaagaagggc agagtccatg gtatgataat ctctgcagac ctgttacaga 360
ccttcttctt cttatagcaa gtggtgtcag aggcgtcact agcaaccctg cgatttt 417

<210> 610
<211> 414
<212> DNA
<213> Glycine max

<400> 610

gaccacgcg tcaaccacg cgctccgcca cgcgtccgc cagcgtccg tacggctgcg 60
agaagacgac agaaggggac tccatcctcc gcttcgtgac ttgcagcaat tcccaatggc 120
ttccgtttcc aagctctcaa cgccaaatcc acttgcttcc ttatcagaag cgcttcgccc 180
ccgagattct cgcttcctca ccttcaaacc ttcttccatc gcttttaatc acaaaactaa 240
cctatccgct tccctccgat ccattcactc gctccctctt aaaacctcct tacggatcaa 300
atgctcccaa acagatggga atggaagtcc tgcaaagagg acagtgcttc atgatcttta 360
tgagaaagaa gggcagagtc catggtatga taatctctgc agacctgtta caga 414

<210> 611
<211> 454
<212> DNA
<213> Glycine max

<400> 611

ccattttcaa gctctcaacg ccactctccag ctgcttcctt atcagaagcg cttcggccca 60
gagattctcg cttcctctcc ttcaatcctt cttccaacgc tattaattac aaaattaacc 120
tctccgcttc cctccgatcc attcactccc tccctcttaa aacctccttg cggatcaaat 180
gctcccaaac agatgggaat ggaagtcctg caaagaggac agtgcttcat gatctttatg 240
agaaagaagg gcagagtcca tggatgata atctctgcag acctgttaca gaccttcttc 300
ctcttatagc aagtgggtgc agaggcgtca ctagcaaccc tgcgattttt cagaaagcta 360
tctcatcatc gaatgcttac aatgatcagt tcacggaact tgtgcaagcg ggaaagacat 420
ttgaagtgca tattgggaac ttgtaatgaa agat 454

<210> 612

<211> 389

<212> DNA

<213> Glycine max

<400> 612

aagtcaattt tcaagctctc aacgccatct ccagctgctt ccttatcaga agcgcttcgc 60
cccagagatt ctogcttctc ctcccttcaat ccttcttcga acgctattaa ttacaaaatt 120
aacctctccg cttccctccg atccattcac tccctccctc ttaaaacctc cttgcggatc 180
aaatgctccc aaacagatgg gaatggaagt cctgcaaaga ggacagtgtc tcatgatctt 240
tatgagaaag aagggcagag tccatggtat gataatctct gcagacctgt tacagacctt 300
cttctcttta tagcaagtgg tgtcagaggc gtcactagca accctgcgat ttttcagaaa 360
gctatctcat catcgaatgc ttacaatga 389

<210> 613

<211> 384

<212> DNA

<213> Glycine max

<400> 613

tcaacgccat ctccagctgc ttctttatca gaagcgcttc gcccagaga ttctcgcttg 60
gtctccttca atccttcttc caacgctatt aattacaaaa ttaacctctc cgcttccctc 120
cgatccattc actccctacc tcttaaaacc tacttgcgga tcaaagtctc ccaaacagat 180

gggaatggaa gtctgcaaa gaggacagt cttcatgac tttatgagaa agataggcag 240
aatccatgga atgacaatct ctgcaaacct gttacagacc ttcttcctct tatagcaagt 300
ggtgtcagag gcgtcactag gcaccctgcg atttttcaga aagctatctc atcatcgaat 360
gcttacaatg atcaattcaa ggaa 384

<210> 614
<211> 408
<212> DNA
<213> Glycine max
<400> 614

agacattgaa agtgcattat gggaacttgt agtgaaggat atccaagatg cttgcaaatt 60
atttgaacca atctatgac aaacagatgg tggatgagc tatgtttctg ttgaagtatc 120
tcccaggctc gctgatgaca ctgagggaac catagaagct gcaaaatggc ttcataaagt 180
ggttgatcgc cccaatgtgt atattaagat tcctgctaca gaggcattgtg tgccttcaat 240
taaggaagtt attgctaatt ggataagtgt gaatgtgacg ctgatattct ctcttgcaag 300
atatgaagct gtaatagatg cttacttgga tggctctgag gcatctgggt taaatgacct 360
gtctagagtt acaagtgttg cctctttctt tgtcagtaga gtggacac 408

<210> 615
<211> 434
<212> DNA
<213> Glycine max
<400> 615

cccacgcgtc cgggctgcca gaagacgaca gaaggggatc aaacagatgg tggatgagc 60
tatgtttctg ttgaagtatc tcccaggctc gctgatgaca ctgagggaac catagaagct 120
gcaaaatggc ttcataaagt ggttgatcgc cccaatgtgt atattaagat tcctgctaca 180
gaggcattgtg tgccttcaat taaggaagtt attgctaatt ggataagtgt gaatgtgacg 240
ctgatattct ctcttgcaag atatgaagct gtaatagatg cttacttgga tggctctgag 300
gcatctgggt taaatgacct ctctagagtt acaagtgttg cctctttctt tgtcagtaga 360
gtggacactc tcattgacaa ggcccttgag aaaattggca cccagaggc tcttaattcta 420
cgtgggaagg cagc 434

<210> 616
 <211> 417
 <212> DNA
 <213> Glycine max

<400> 616

tgcttgcaaa ttatttgaac caatctatga tcaaacagat ggtggtgatg gctatgtgtc 60
 tgttgaagta tctcccaggc tcgctgatga cactgagggg accatagaag ctgcaaaatg 120
 gcttcataaa gtggttgatc gcccgaatgt gtatattaag attcctgcta cagaggcatg 180
 tgtgccttca attaaggaag ttattgctaa tgggataagt gtgaatgtga cgctgatatt 240
 ctctcttgca agatatgaag ctgtaataga tgcttacttg gatggtcttg aggcatctgg 300
 gttaaattgac ctctctagag ttacaagggg ttgcttcttc tttgtcagta gagtggacac 360
 tctcattgac aaagcccttg agaaaattgg caccacagag gctcttaatc tacgtgg 417

<210> 617
 <211> 328
 <212> DNA
 <213> Glycine max

<400> 617

tacggctgcg agaagacgac agaagggggg ataagtgtga atgtgacgct gatattcttg 60
 cttgcaagat atgaagctgg ggtagatgct tacttgatg gtcttgaggc atctgggtta 120
 aatgacctct ctagagttac aagtgttgcc tctttctttg tcagtagagt ggacactctc 180
 attgacaagg cccttgagaa aattggcacc ccagaggctc ttaatctacg tgggaaggca 240
 gcagtggccc aagcagcatt ggcttaccag cgtctccgaa ggaaatgttc tgggtccaagg 300
 tgggaagctc tagttaaaaa tggggcca 328

<210> 618
 <211> 290
 <212> DNA
 <213> Zea mays

<400> 618

aacatttgtt tacagtttctg cacaagcggc agcgtcagca caagctggtg catctgtagt 60
 acaaatgttt gtgggccgat tgcgggactg ggcaaggcat cactctggtg accagagat 120

agatgaagct ttgaagaatg gagaagatgc tgggctttct ttggcgaaga aagtatatgc 180
ctatatccac aggattgggt acaaaacaaa gctgatggcc gctgccatac ggaacaagca 240
ggacgtatct agccttctgg ggattgatta cattattgcc cactgaagat 290

<210> 619
<211> 300
<212> DNA
<213> Zea mays

<400> 619

gatttattga caacaccgat cctgctggga ttgatcatca aattgctcaa ctaggacctg 60
aactggcaac tactcttgta attgtcattt ctaagagcgg aggcacacct gaaacccgca 120
atggtctact agaagtacag aaagccttca gagatgcggg gctgcaattc tcgaaacagg 180
gtgttgcaat tactcaagaa aattctctgt tggataacac tgctagaata gagggatggt 240
tagctcggtt tcctatgttt gattgggttg gtggtaggac ttcagaaatg tctgctgtgg 300

<210> 620
<211> 208
<212> DNA
<213> Zea mays

<400> 620

cgccaacccc gacgaggggc gcatgggtgg ccaactactgg ctccgcgacc cggccctcgc 60
tcccaactcc ttccctccgga acaagatcga gaccgcactc gacaaaatcc tcgccttctc 120
ccaagatgtc atctctggaa agattctttc cccatctggt cgtttcactt caattctctc 180
tataggaatc ggaggggtcag ctttgggc 208

<210> 621
<211> 267
<212> DNA
<213> Zea mays

<400> 621

cccacgcgtc cgataaact gccagaatag agggatggtt agctcggttt cctatgtttg 60
actgggttgg tggtaggact tcagaaatgt cagctgttgg tttacttcca gctgcattgc 120
agtgtattga tatcaaggaa atgctatttg gtgcagcttt aatggatgag gaaacccgga 180

acactgtggt taaagcaa at ccagcagcat tgcttgcat atgttggtat tgggcatcgg 240
aagggatagg caaaaaggat atggttg 267

<210> 622
<211> 258
<212> DNA
<213> Zea mays

<400> 622

agcttctcgc tttttaacc acagttgtca acctaactgt cggctggaga aatggaatca 60
gagggctctgc ttatgggcct caatttggtg ctaaaccact tgcacctgat aaccctccac 120
tgaaggtaag atttattgac aacatcgatc ctggtgggat tgatcatcaa attgctcaac 180
taggatctca actggcaact agctactctt gtaattgtca tttctaagaa cacttgaggg 240
agggggaact gctgaagc 258

<210> 623
<211> 229
<212> DNA
<213> Zea mays

<400> 623

gcagaatgtg aacagggcca caactgggat tccttgaaat gttgatccag ttgacgttgc 60
acgaagcatt aaagatttgg atccagaaac cactctggtg gtggctgtat caaagacatt 120
cacaacagct gaaacaatgt taaatgctcg aactcctaag gagtggatcg tttcttctct 180
tgggacacag gctgttgcca tacatatgat tgctgtcagc actaatctt 229

<210> 624
<211> 337
<212> DNA
<213> Zea mays

<400> 624

aggttggaca gcttttatcc atctatgagc accggattgc agttcagggc ttcatatggg 60
gaattaactc atttgacca tggggagtgg acctagggaa gtcactcgct tctcaagtga 120
ggaaacagct gcatggaacc cggatggaag gaaagcctgt tgagggtttt aaccacagca 180
cttcaagttt gcttgcacga tatcttgctg tcaagccatc caccctgat gatactaccg 240

tgctgccgaa ggtgtaatta ctcaagttgtt ttgacatgc caattgctga gctctgactt 300
ggcaagggtg agcataagtc tttcttcatt ttggggag 337

<210> 625
<211> 248
<212> DNA
<213> Zea mays

<400> 625

gcggggctgc aattctcgaa acaggggtgtt gcaattactc aagaaaattc tctgttggat 60
aacactgcta gaatagaggg atggtttagct cggtttccta tgtttgattg gggttggtgtt 120
aggacttcag aaatgtctgc tgtgggttta cttccagctg cattgcaggg tattgatatc 180
aaggaaatgc tagctgggtgc agctttaatg gatgaagaaa cccggaacac tgtgggttaa 240
gaaaatcc 248

<210> 626
<211> 288
<212> DNA
<213> Zea mays

<400> 626

gttgcaatca ctcaagaaaa ttctctgttg gataacactg ccagaataga gggatgggtta 60
gctcggtttc ctatgtttga ctgggttggt ggtaggactt cagaaatgtc agctgttggt 120
ttacttccag ctgcattgca gggatttgat atcaaggaaa tgctagttgg tgcagcttta 180
atggatgagg aaaccgggaa cactgtggta tcacattatt aataacacgg acaacttgca 240
gtgatggcat gattatctat atgtgtcatg tcaacatggt tatctttt 288

<210> 627
<211> 243
<212> DNA
<213> Zea mays

<400> 627

tgatgcgggt ctgcaattct cgaaacaggg tggtgcaatc actcaagaaa attctctgtt 60
ggataacact gccagaatag agggatgggt agctcggttt cctatgtttg actgggttggt 120
tggtaggact tcagaaatgt cagctgttggt tttacttcca gctgcattgc agggatttga 180

tatcaaggaa atgctagttg gtgcagcttt aatggatgag gaaacccgga acactgtggt 240
taa 243

<210> 628
<211> 235
<212> DNA
<213> Zea mays

<400> 628

cagaaaagcct tcagagatgc agggctgcaa ttctcgaaac aggggtgttg aattactcaa 60
gaaaattctc tgttgataa cactgctaga atagagggat ggtagctcg gtttcctatg 120
tttgattggg ttggtggtag gacttcagaa atgtcagctg tgggtttact tccagctgca 180
ttgcagggta ttgatataca ggaaatgcta gctgggtgcag ctttaatgga tgagg 235

<210> 629
<211> 296
<212> DNA
<213> Zea mays

<400> 629

cgacagaatc ctcgccttct ctcaagatgt cgtctctgga aagattcttt ccccatctgg 60
tcgtttcact tcaattctct ctataggaat cggagggtca gctttgggccc ctcaatttgt 120
tgctgaggca cttgcgcctg ataaccctcc actgaagata agatttattg acaacaccga 180
tcctgctggg attgatcatc aaattgctca actaggacct gaactggcaa ctactcttgt 240
aattgtcatt tctaagagcg gaggcacacc tgaaacccgc aatgggctac tggaag 296

<210> 630
<211> 228
<212> DNA
<213> Zea mays

<400> 630

gaaagattct ttccccatct ggtcgtttca cttcaattct ctctatagga atcggagggt 60
cagctttggg ccctcaattt gttgccgagg cacttgcacc tgataaccct ccactgaaga 120
taagatttat tgacaacaca gatcctgctg ggattgatca tcaaattgct caactaggac 180
ctgaactggc aactactcgt gaaagtgaca ttcttaagag cggcggca 228

<210> 631
 <211> 304
 <212> DNA
 <213> Zea mays

<400> 631

cccacgcgtc cgccgcactc gacagaatcc tcgccttctc tcaagatgtc gtctctggaa 60
 agattctttc cccatctggt cgtttcactt caattctctc tataggaatc ggaggggtcag 120
 ctttgggccc tcaatttggt gctgaggcac ttgcgcctga taaccctcca ctgaagataa 180
 gatttattga caacaccgat cctgctggga ttgatcatca aattgctcaa ctaggacctg 240
 aactggcaac tactcttgta attgtcattt ctaagagcgg aggcacacct gaaacccgca 300
 atgg 304

<210> 632
 <211> 273
 <212> DNA
 <213> Zea mays

<400> 632

ctttatgcaa atgaccggga gtctatctct gttactgtgc aagaggtaac tcctagagct 60
 gttggagcac tgattgcact ttatgaacgt gctgtgggga tttatgcttc tttggtaaata 120
 atcaatgcct atcatcagcc tgggtgttgag gctgggaaaa aggcagcagg agaagtattg 180
 gcccttcaga aaagggttct gactgtatta aaggaggcca tctgcgagaa ccctactgag 240
 ccattgactc tagatgaaat tgcagatcgc tgc 273

<210> 633
 <211> 322
 <212> DNA
 <213> Zea mays

<400> 633

ctatcatcaa cctgggtgttg aggctgggaa aaaggcagca ggagaagtgt tggcccttca 60
 gaaaagggtg ctgactgtat taaatgaggc aacctgcaag gacccttgtg agccattgac 120
 tatagatgaa attgcagatc gctgccattg ccctgaagat attgagatga tctacaaaat 180
 agtccagcac atggctgcta acgacagagc aatcatagca gaaggcagct gtggctctcc 240

tgcgacggtt aaggtgtacc tcggtgaatg caatgtagac gaagacttgc aggccgcgta 300
 gggtccgagc ctggatccgt gt 322

<210> 634
 <211> 264
 <212> DNA
 <213> Zea mays

<400> 634

atcaacctgg tgttgaggct gggaaaaagg cagcaggaga agtggtggcc cttcagaaaa 60
 gggtgctgac tgtattaaat gaggcaacct gcaaggaccc ttgtgagcca ttgactatag 120
 atgaaattgc agatcgctgc cattgccctg aagatattga gatgatctac aaaatagtcc 180
 agcacatggc tgctaacgac agagcaatca tagcagaagg cagctgtggc tctcctcgca 240
 gcgttaaggt gtacctcggt gaat 264

<210> 635
 <211> 310
 <212> DNA
 <213> Zea mays

<400> 635

cggacgcgtg gtttgagtag atatttgcaa caacttgtca tggaaatctct tggaaaagaa 60
 ttogacctgg atggcaaccg tgttaatcaa gggctaactg tatatggtaa caaaggaagc 120
 actgaccagc atgcttacat tcagcagctg agagaagggtg tacaaaactt ctttggttacg 180
 tttattgagg tcttgcgtag caggcctgct ggacatgatt ggagacttga acctggagtc 240
 acgtgtggtg actatttggt tgggatgttg cagggaaccc gttctgctct ttatgcaaat 300
 gaccgggagt 310

<210> 636
 <211> 295
 <212> DNA
 <213> Zea mays

<400> 636

gttgcttttg agtagatatt tgcaacaact tgtcatggaa tctcttggga aagaatttga 60
 tctggatggc aaccgggtaa atcaagggt atctgtatat ggaaacaaag gaagtactga 120

ccagcagct tacattcagc agctgagaga aggtgtacac aacttctttg ttacttttat 180
 cgaggtcttg cgtgacaggc ctgctgggtca tgattgggag cttgaacctg ggtcacatg 240
 tgggtgactat ttgtttggga tgttgacagg aacacgttct gctctttatg caaat 295

<210> 637
 <211> 293
 <212> DNA
 <213> Zea mays

<400> 637

acaaaggaag cactgaccag cacgcttaca ttcagcagct gagagaaggt gtacacaact 60
 tctttgttac ttttatcgag gtcttgctg acaggcctgc tggcatgat tgggagcttg 120
 aacctggagt cacatgtggt gactatttgt ttaggatgtt gcagggaaca cgttctgctc 180
 tttatgcaaa tgaccgtgaa tctatctctg ttactgtgca agaggtaact cctagagctg 240
 ttggagcact ggttgacact tatgaacgtg ctgtggggct ttatgcttct ttg 293

<210> 638
 <211> 281
 <212> DNA
 <213> Zea mays

<400> 638

ggtgtacaaa acttctttgt tacgtttatt gaggtcttgc gtgacaggcc tgctggacat 60
 gattgggagc ttgaacctgg agtcacgtgt ggtgactatt tgtttgggat gttgcaggga 120
 acccgttctg ctctttatgc aaatgaccgg gagtctatct ctgttactgt gcaagaggta 180
 actcctagag ctgttgagc actgattgca ctttatgaac gtgctgtggg gatttatgct 240
 tctttggtaa atatcaatgc ctatcatcag cctgggtgtg a 281

<210> 639
 <211> 263
 <212> DNA
 <213> Zea mays

<400> 639

ccggaacact gtgggttaaag aaaatccagc agcattgctt gcattatggt ggtattgggc 60
 atcagaaggg ataggcaata aggatatggt tgtacttcct tacaaggata gtttgttgct 120

tttgagtaga tatttgcaac aacttgcat ggaatctctt gggaaagaat ttgatctgga 180
 tggcaaccgg gtaaatcaag ggctatctgt atatggaaac aaaggaagca ctgaccagca 240
 cgcttacatt cagcagctga gag 263

<210> 640
 <211> 300
 <212> DNA
 <213> Zea mays

<400> 640

cgacgcgtg gtgctagctg gtgcagcttt aatggatgag gaaacccgga acactgtggt 60
 taaagaaaat ccagcagcat tgcttgcat atgttgctat tgggcatcag aagggatagg 120
 caataaggat atggttgtag ttctttacaa ggatagtttg ttgcttttga gtagatattt 180
 gcaacaactt gtcattgaat ctcttgggaa agaatttgat ctggatggca accgggtaaa 240
 tcaagggtta tctgtatatg gaaacaaagg aagcactgac cagcacgctt acattcagca 300

<210> 641
 <211> 313
 <212> DNA
 <213> Zea mays

<400> 641

cccacgcgtc cgccacgcg tccggggtat tgatatcaag gaaatgctag ctggtgcagc 60
 tttaatggat gaagaaacc ggaacactgt ggtaaagaa aatccagcag cattgcttgc 120
 attatgttgg tattgggcat cagaaggat aggcaataag gatatggttg tacttcctta 180
 caaggatagt ttgttgcttt tgagtagata ttgcaacaa cttgtcatgg aatctcttgg 240
 gaaagaattt gatctggatg gcaaccgggt aaatcaagg ctatctgtat atggaaacaa 300
 aggaagtact gac 313

<210> 642
 <211> 298
 <212> DNA
 <213> Zea mays

<400> 642

gatagtttgt tacttttgag tagatatttg cctatccctt ccgatgccca ataccagcag 60

cattgcttgc attatgttgg tattgggcat cggaagggat aggcaaaaag gatatggttg 120
 tgcttcctta taaggatagt ttgttacttt tgagtagata ttgcaacaa cttgtcatgg 180
 gatctcttgg aaaagaattc gacctggatg gcaaccgtgt taaacaaggg ctaactgtat 240
 atggtaacaa aggaagcact gaccagcatg cttacattca gcagctgaga gaaggtgt 298

<210> 643
 <211> 274
 <212> DNA
 <213> Zea mays

<400> 643

gaggtcttgc gtgacaggcc tgctgggtcat gattggggagc ttgaacctgg agtcacgtgt 60
 ggtgactatt tgtttgggat gttgcaggga acccgttctg ctctttatgc aaatgaccgg 120
 gagtctatct ctgttacgtg caagaggtaa ctctagagc tgttggagca ctgatttcac 180
 tttatgaacg tgctgtgggg atttatgctt ctttggtaaa tatcaatgcc tatcatcagc 240
 ctggtgttga ggctgggaaa aaggcagcag gaga 274

<210> 644
 <211> 284
 <212> DNA
 <213> Zea mays

<400> 644

cagctgcatt gcagggtatt gatatcaagg aaatgctagc tgggtgcagct ttaatggatg 60
 aggaaacccg gaacactgtg gttaaagaaa atccagcagc attgcttgca ttatgttggt 120
 attgggcatc agaagggata ggcaataagg atatggttgt acttccttac aaggatagtt 180
 tgttgctttt gagtagatat ttgcaacaac ttgtcatgga atctcttggg aaagaatttg 240
 atctggatgg caaccgggta aatcaaggct atctgtatat ggaa 284

<210> 645
 <211> 306
 <212> DNA
 <213> Zea mays

<400> 645

cggacgcgtg gtgctagctg gtgcagcttt aatggatgag gaaaccgga aactgttggt 60

taaagaaaat ccagcagcat tgcttgcatt atactggtat tgggcatcag aagggatagg 120
 caataaggat atggttgtac ttccttaciaa ggatagtttg ttgcttttga gtagatattt 180
 gcaacaactt gtcatggaat ctcttgggaa agaatttgat ctggatggca accgggtaaa 240
 tcaagggcta tctgtatatg gaaacaaagg aagcactgac cagcacgctt acattcagca 300
 gctgag 306

<210> 646
 <211> 271
 <212> DNA
 <213> Zea mays

<400> 646

cccacgcgtc cgcccacgcg tccgcccacg cgtccgcgag gtcttgcgtg acaggcctgc 60
 tggatcatgaa tgggagcttg aacctggagt cacatgtggt gactatattgt ttgggatggt 120
 gcagggaaca cgttctgctc tttatgcaaa tgaccgtgaa tctatctctg ttactgtgca 180
 agaggtaact cctagagctg ttggagcact ggttgcactt tatgaacgtg ctgtggggct 240
 ttatgcttct ttggtaaata tcaatgccta t 271

<210> 647
 <211> 228
 <212> DNA
 <213> Zea mays

<400> 647

cggacgcgtg ggggtgtaca caacttcttt gttacgttta ttgaggtctt gcgtgacagg 60
 cctgctgggc atgattggga gcttgaacct ggagtcacgt gtggtgacta tttgtttggg 120
 atgttgcagg gaaccggttc tgctctttat gcaaataacc gggagtctat ctctgttact 180
 gtgcaagagg taactcctag agctgttggg gcactgattg cactttat 228

<210> 648
 <211> 275
 <212> DNA
 <213> Zea mays

<400> 648

tggtgtacac aacttctttg ttacttttat cgaggtcttg cgtgacaggc ctgctgggtca 60

tgattgggag cttgaacctg gagtcacatg tggtgactat ttgtttggga tgttgcaggg 120
aacacgttct gctctttatg caaatgaccg tgaatctatc tctgttactg tgcaagaggt 180
aactcctaga gctgttggag cactggttgc actttatgaa cgtgctgtgg ggctttatgc 240
ttcttggtaa atatcaatgc tatcatcaac tgggtg 275

<210> 649
<211> 203
<212> DNA
<213> Zea mays

<400> 649

tgttgtactt ccttacaagg atagtttggt gcttttgagt agatatttgc aacaacttgt 60
catggaatct cttgggaaag aatttgatct ggatggcaac cgggtaaadc aagggtatc 120
tgtatatgga aacaaaggaa gcactgacca gcacgcttac attcagcagc tgagagaagg 180
tgacacaact tctttgttac ttt 203

<210> 650
<211> 285
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 650

gttgtcaggg tattgatatc aaggaaatgc tagctggtgc agctttaatg gatgaagaaa 60
cccggaacac tgtggttaaa gaaaatccag cagcattgct tgcattatgt tggatttggg 120
catcagaagg gataggcaat aaggatatgg ntgtacttcc ttacaaggat agtttgttgc 180
ttttgagtag atatttgcaa caacttgtca tggaatctct tgggaagaat tgatctggat 240
gcaaccggta aatcaaggct atctgatatg aaacaaagaa gactg 285

<210> 651
<211> 267
<212> DNA
<213> Zea mays

<400> 651

tatcttgctg tcaagccatc caccocgtat gatactaccg tgctgccgaa gtgtaattac 60

cggaagccat ggcgtcggca ggcctaattct gcggcacgga gcagtggaag gccctccagg 180
 cgcacgtcgg cgcgattcag aagacgcacc tgcgcgacct gatggccgac gccgaccgat 240
 gcaaggcaat gacggctgag tatgaaggga tctttctgga ttactcgaga cagcaggcga 300
 ctggtgaaac catggagaag 320

<210> 655
 <211> 278
 <212> DNA
 <213> Zea mays

<400> 655

caccgtcttc cgcccgcca ccgtttccag cacacagggt aaaggcaagc aaacgagcgt 60
 ggggacggct agcccgcaat acaaaatccg gaggaactct caggaggcga aaagcagatc 120
 tgtctcccc gaccggcgat cgctatcgac ttgtagcgga agccatggcg tcggcagcgc 180
 taatctgcgg cacggagcag tggaaggcac tccaggcgca cgtcggcgcg attcagaaga 240
 cgcaactgcg cgacctgatg gccgacgccg accgatgc 278

<210> 656
 <211> 105
 <212> DNA
 <213> Zea mays

<400> 656

caaaatccgg aggaactccc aggaggcgaa aagcagatcc gtctcccccg agccccgacc 60
 ggcgatcgct atcgacttgt agcggaagcc atggcgtcgg cagcg 105

<210> 657
 <211> 267
 <212> DNA
 <213> Zea mays

<400> 657

acccgatcaa gctgtgggag cgctacgtcg agtggctcta ccagcacaag gagctcggca 60
 tcttcgtcga cgtcagccgg atgggggttca cggaggagtt cctgcggcag atggagccgc 120
 ggatgcagca ggccttcgtc gacatgcggg agctcgagaa gggcgccatc gccaaccccc 180
 acgagggtcg catggtgggc cactactggc tccgcgaccc ggccctcgct cccaactcct 240

tcctccggaa caagatcgag accgcac

267

<210> 658

<211> 325

<212> DNA

<213> Zea mays

<400> 658

tgccatattc tcaggcactt gagaagttgg caccacatat acagcagctt agcatggaga 60

gtaacgggaa ggggtgtttcc attgatggcg cccaactttc ctttgagaca ggtgaaattg 120

atthttgtga acctcgaact aatggccagc acagcttcta tcaattaatc catcagggaa 180

gggttatccc ttgcgacttt attggtgttg ttaaaagtca gcagcctgtt tacttgaaag 240

gggaaactgt gagtaatcat gatgagctta tgtccaattt ctttgcccaa cctgatgctc 300

ttgcttatgg aaagactcct gaaca 325

<210> 659

<211> 316

<212> DNA

<213> Zea mays

<400> 659

tccagctagg gcaatattgc catattctca ggcacttgag aagttggcac cacatataca 60

gcagcttagc atggagagta acgggaaggg tgtttccatt gatggcgccc aactttcctt 120

tgagacaagt gaaattgatt ttggtgaacc tggaactaat ggccagcaca gcttctatca 180

attaatccat cagggaaggg ttatcccttg cgactttatt ggtgttgta aaagtcagca 240

gcctgtttac ttgaaagggg aaactgtgag taatcatgat gagcttatgt ccaatttctt 300

tgcccaacct gatgct 316

<210> 660

<211> 300

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 660

atcaaagaca ttcacaacag ctgnaaaca tgttaaagtc tcgaactctt aaggagtggg 60

tcgtttcttc tcttgggcca caggctgttg ccaaacatat gattgctgtc agcactaatc 120

ttaagcttgt gaaggagttt ggaattgacc caaacaatgc ttttgccctt tgggactggg 180
 ttggcgcccg ttatagtgtt tgcagtgtg ttggcgcttct gccattatct cttcagtatg 240
 gctttccaat tgtccagaaa tttttggagg gagcttccag tatcgacaac cacttctact 300

<210> 661
 <211> 334
 <212> DNA
 <213> Zea mays

<400> 661

ctcatgatga gcttatgtcc aatttctttg cccaacctga tgctcttgct tatggaaaga 60
 ctctgaaca gttgcacagt gagaaagttc cagataatct tatccctcat aagactttta 120
 agggcaaccg gccatcacta agtttgcttc tgcctacact atctgcatat gaggttggac 180
 agcttttata catctatgag caccggattg cagttcaggg cttcatatgg ggaattaact 240
 catttgacca ctagggagtg gagctagga agtcactcgc ttctcaagtg aggaaacagc 300
 tgcatggaac ccggatggaa ggacacctgt tgag 334

<210> 662
 <211> 279
 <212> DNA
 <213> Zea mays

<400> 662

ggtgaacctg gaactaatgg ccagcacagc ttctatcaat taatccatca gggaagggtt 60
 atcccttgcg actttattgg tgttggttaa agtcagcagc ctgtttactt gaaaggggaa 120
 actgtgagta atcatgatga gcttatgtcc aatttctttg cccaacctga tgctcttgct 180
 tatggaaaga ctctgaaca gttgcacagt gagaaagttc cagaaaatct tatccctcat 240
 aagactttta agggcaaccg gccatcacta agtttgctt 279

<210> 663
 <211> 274
 <212> DNA
 <213> Zea mays

<400> 663

tgcaaagtgt gatccagttg acgttgacg aagcattaaa gatttggatc cagaaaccac 60

tctggtggtg gttgtatcaa agacattcac aacagcggaa acaatgttaa atgctcgaac 120
tcttaaggag tggatcgttt cttctcttgg gccacaggct gttgccaaac atatgattgc 180
tgtcagcact aatcttaagc ttgtgaagga gtttgggaatt gacccaaaca atgcttttgc 240
cttttgggac tgggttggcg gccgttatag tgtt 274

<210> 664
<211> 283
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 664

gccacaggct gttgccaaac atatgattgc tgtcagcact aatcttaagc ttgtgaagga 60
gtttggaatt ganccaaaca atgcttntgc ctnttgggac tgggttggcg gccgttatag 120
tgtttgcagt gctgttggcg ttctgccatt atctcttcag tatggcttgc caattgtcca 180
gaaatTTTTg gagggagctt ccagcattga caaccactnc tactcatctt catgtgagaa 240
naatataccn gtacntcttg gtgctgagtg tgtggaatgt ttc 283

<210> 665
<211> 269
<212> DNA
<213> Zea mays

<400> 665

gccacaggct gttgccaaac atatgattgc tgtcagcact aatcttaagc ttgtgaagga 60
gtttggaatt gacccaaaca atgcttttgc cttttgggac tgggttggcg gccgttatag 120
tgtttgcagt gctgttggcg ttctgccatt atctcttcag tatggcttgc caattgtcca 180
gaaatTTTTg gagggagctt ccagcattga caaccacttc tactcatctt catttgagaa 240
aaatataccg tacttcttgg tttgctgag 269

<210> 666
<211> 299
<212> DNA
<213> Zea mays

<400> 666

agaagtggat catgggttgg agcaactgga aaaccgttga caaatgttgt gtcagttgga 60
ataggtggta gctttcttgg ccctctatth gtgcatactg cactccagac cgatccagaa 120
gcagcagaat gtgcaaaagg ccggcaactg agattccttg caaatgttga tccagttgac 180
gttgcacgaa gcattaaaga ttggatcca gaaaccactc tgggtggtgg tgtatcaaag 240
acattcacia cagctgaaac aatgttaaht gctcgaactc ttaaggagtg gatcgthtc 299

<210> 667
<211> 276
<212> DNA
<213> Zea mays

<400> 667

ttggaattga cccaaacaat gcttttgcct tttgggactg ggttggcggc cgttatagtg 60
tttgcagtgc tgttggcgtt ctgccattat ctcttcagta tggctttcca attgtccaga 120
aatttttggg gggagcttcc agcattgaca accacttcta ctcatcttca tttgagaaaa 180
atatacctgt acttcttggg ttgctgagtg tgtggaatgt tcatttcttg gttatccagc 240
tagggcaata tgccatatct caggcacttg agaagt 276

<210> 668
<211> 255
<212> DNA
<213> Zea mays

<400> 668

ctccaagaga tgcagtcata aacagtgatg gggtgactgt ggtccctgag gtttggagtg 60
ttaaagataa aatcaagcag ttttcagaga cttttagaag tggatcatgg gttggagcaa 120
ctggaaaacc gttgacaaat gttgtgtcgg ttggaatagg tggtagcttt cttggccctc 180
tatttgtgca tactgcactc cagaccgatc cagaagcagc agaatgtgca aaaggccggc 240
aactgagatt ccttg 255

<210> 669
<211> 233
<212> DNA
<213> Zea mays

<400> 669

gcacgaggtt ctgccattat ctcttcagta tggctttcca attgtccaga aatttttggg 60
 gggagcttcc agcattgaca accacttcta ctcatcttca tttgagagaa atatacctgt 120
 acttcttggt ttgctgagtg tgtggaatgt ttcatttctt ggttatccag ctagggcaat 180
 attgtcatat tctcaggcac ttgagaagtt ggcaccacat atacagcagc tta 233

<210> 670
 <211> 191
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 670

aatttctttg cccaacctga tgctcttgct tatggaaaga ctctgaaca gttgcacagt 60
 gagaaagttc cagaaaatct tatccctcat aagactttta agggcaaccg gccatcacta 120
 agtttgcttc tgcctacact atccgcatat gaggtggaca gttttaancc tctatngggc 180
 ncggtttnan t 191

<210> 671
 <211> 115
 <212> DNA
 <213> Zea mays
 <400> 671

gtggtagctt tcttggccct ctatttgtgc atactgcact ccagaccgat gcagaagcag 60
 cagaatgtgc aaaaggccgg caactgagat tccttgcaaa tgttgatcca gttga 115

<210> 672
 <211> 113
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 672

ggagtttggg attgacccaa acaatgcttt tgccttttgg gactgggttg gcggccgtta 60
 tagtgtttgc agtgctgttg gcgntctgcc attatctctt cagtatggct ttc 113

<210> 673
 <211> 122
 <212> DNA

<213> Zea mays

<400> 673

tatcttatcc ctcataagac ttttaagggc aaccggccat cactaagttt gcttctgcct 60
acactatctg catacgaggt tacgacagct tttatccatc tatgagcacc ggattgcagt 120
tc 122

<210> 674

<211> 443

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 674

agtctatctc tgttactgtg caagaggtaa ctcctanagc tgttggagna ctgattgcac 60
tttatgaacg tgctgtgggg atttatgctt ctttggtaaa tatcaatgcc tatcatcagc 120
ctgggtgttg ggctgggaaa aaggcancan gagaagtatt ggcccttcag aaaagggttc 180
tgactgtatt aaaggaggcc atctgcnaga accctactga gccattgact ctagatgaaa 240
ttgcagatcg ctgacattgc cctgaagata ttganatgat ctacanaata atccancaca 300
tggcttctaa cgacagatca cttatagcag aaggcatctg cngctttctt ngcagtgtta 360
aggtgtacct nggtgaaatg caattttgga ccnaantatg caggccggga tagattctgn 420
gtcnggancn aagtaacatt ntt 443

<210> 675

<211> 420

<212> DNA

<213> Zea mays

<400> 675

ctcttgggaa agaatttgat ctggatggca accgggtaaa tcaagggcta tgtgtagatg 60
gaaacaaagg aagcactgac cagcacgctt acattcagca gctgagagaa ggtgtacaca 120
acttctttgt tacttttata gaggtcttgc gtgacaggcc tgctggtcat gattgggagc 180
ttgaacctgg agtcacatgt ggtgactatt tgtttgggat gttgcaggga acacgttctg 240
ctctttatgc aaatgaccgt gaatctatct ctgttactgt gcaagaggta actcctagag 300
ctgttggagc actggttgca ctttatgaac gtgctgtggg gctttatgct tctttggtaa 360

atatcaatgc ctatcatcaa cctggtgttg aggctgggaa aaaggcagca ggagaagtgt 420

<210> 676
<211> 349
<212> DNA
<213> Zea mays

<400> 676

tgcggtcaag caatcaaccc cgtatgatac aaccgtgctg ccgaaggtgt aattaccag 60

ttgtttttga catgccaatt gctgagttct gacttggcaa ggttgagcat aagtctttct 120

tcatttgga gttatcacag agccagtttg gcagtgtgt agttttggtt ttacctactc 180

tttgtagaag aaaagtgaag agtggatatt atggaacaaa atatatacct acggcagcac 240

gcagcatgat gaaacatatt taaaaaattt ggggtgtcta ccacatgccc gtggaataaa 300

acggatgtaa actcagtga aaaaaaaaaa aaaaaaaaaa aaacaaaaa 349

<210> 677
<211> 376
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<400> 677

aacgagcggc gggacggcta gcccgcata caaatccgg aggaactccc aggaggcgaa 60

aagcagatcc gtctcccccg agccccgacc ggcgatcgct atcgacttgt agcggaagcc 120

atggcgctcg cagcgcta atctgcggcac gagcagtgga aggcctcca ggcgcacgtc 180

ggcgcgattc agaagacgca cctgcgcgac ctgatggccg acgccgaccg atgcaaggca 240

atgacggctg agtatgaagg gatctttctg gattactcga gacagcaggc gactggtgaa 300

accctggaga agtccttaa atgggctgac gctgcgaagc tcaaggagaa ngatgagaag 360

atgtttaaag gtgaaa 376

<210> 678
<211> 451
<212> DNA
<213> Zea mays

<400> 678

ccgtatatag tgtttgcagt gctggtggcg ttctgccatt atctcttcag tatggctttc 60
caattgtcca gaaatTTTTg gagggagctt ccagcattga caaccacttc tactcatctt 120
catttgagaa aaatatacct gtacttcttg gtttgctgag tgtgtggaat gtttcatttc 180
ttggttatcc agctagggca atattgccat attctcaggc acttgagaag ttggcaccac 240
atatacagca gcttagcatg gagagtaacg ggaagggtgt ttccattgat ggcgccaac 300
tttcctttga gacaggtgaa attgattttg gtgaacctgg aactaatggc cagcacagct 360
tctatcaatt aatccatcaa ggaagggtta tcccttgcca ctttattggt gttgttaaaa 420
gtcagcagcc tgtttacttg aaaaggga c 451

<210> 679
<211> 453
<212> DNA
<213> Zea mays

<400> 679

gtcatgcact ggagacgttg gcactacata tacagcagct tatcatggat agtaacgggg 60
ggggtgtttc cattgatggc gcccaacttt cctttgagac aggtgaaatt gattttggtg 120
aacctggaac taatggccag cacagcttct atcaattaat ccatcaggga agggttatcc 180
cttgcgactt tattggtggt gttaaaagtc agcagcctgt ttacttgaaa ggggaaactg 240
tgagtaatca tgatgagctt atgtccaatt tctttgcca acctgatgca cttgcttatg 300
gaaagactcc tgaacagttg cacagtgaga aagttccaga aaatcttatt cctcataaga 360
cttttaaggg caaccggcca tctaagtt tgcttctgcc tacactatcc gcatatgagg 420
ttggacagct tttatccatc tatgagcacc gga 453

<210> 680
<211> 419
<212> DNA
<213> Zea mays

<400> 680

aaaatcaagc agttttcaga gacttttaga agtggatcat gggttggagc aactggaaaa 60
ccgttgacaa atgttgtgtc agttggaata ggtggtagct ttcttgcccc tctatttgtg 120
catactgcac tccagaccga tccagaagca gcagaatgtg caaaaggccg gcaactgaga 180

ttccttgcaa atgttgatcc agttgacgtt gcacgaagca ttaaagattt ggatccagaa 240
 accactctgg tgggtggtgt atcaaagaca ttcacaacag ctgaaacaat gttaaagtct 300
 cgaactctta aggagtggat cgtttcttct cttgggccac aggctgttgc caaacatatg 360
 attgctgtca gcactaatct taagcttgtg aaggagtttg gaattgaccc aaacaatgc 419

<210> 681
 <211> 426
 <212> DNA
 <213> Zea mays

<400> 681

ctcgcgggcc gacacacgcc tctacatttc ttggttatac agctagggca atattgccat 60
 attctcaggc acttgagaag ttggcaccac atatacagca gcttagcatg gagagtaacg 120
 ggaaggggtgt ttccattgat ggcgccaac tttcctttga gacaggtgaa attgattttg 180
 gtgaacctgg aactaatggc cagcacagct tctatcaatt aatccatcag ggaaggggta 240
 tcccttgcca ctttattggt gttgttaaaa gtcagcagcc tgtttacttg aaaggggaaa 300
 ctgtgagtaa tcatgatgag cttatgtcca atttctttgc ccaacctgat gctcttgctt 360
 atggaaagac tcctgaacag ttgcacagtg agaaagttcc agaaaatctt atccctcata 420
 agactt 426

<210> 682
 <211> 323
 <212> DNA
 <213> Zea mays

<400> 682

gcgaagctca aggagaagat tgagaagatg tttaaaggtg aaaagataaa tagcacagag 60
 aacaggtcag tgcttcatgt agctctgagg gctccaagag atgcagtcac aaacagtgat 120
 ggggtgaatg tgggtccctga gggtcggagt gttaaagata aaatcaagca gttttcagag 180
 acttttagaa gtggatcatg gggtggagca actggaaaac cgttgacaaa tgttgtgtcg 240
 gttggaatag gtggtagctt tcttggccct ctatttgtgc atactgcact ccagaccgat 300
 ccagaagcag cagaatgtgc aaa 323

<210> 683

<211> 422
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 683

ccaaaactga gtctcattac aaatgtngat cnanttgacg ttgcacnaan cattaaagat 60
 ttggntccag aaaccacccn ggtggtggtt gtancaaaga cattcacaac agcggaaaca 120
 atgttaaatg ctggaactct taaggagtgg atcgtttctt ctcttgggcc acaggctggt 180
 gccaaacata tgattgctgt cagcactaat cttaagcttg tgaaggagt ttgaattgac 240
 ccaaacaatg cttttgcctt ttgggactgg gttggcgccc gttatagtgt ttgcagtgct 300
 gttggcgctt tgccattact cttcagtatg gctttccaat tgtccagaaa tttttggagg 360
 gaacttccag ncattgacaa acaacttcna ntcnnctnc attttgagaa aaatatacct 420
 gt 422

<210> 684
 <211> 122
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 684

ggtgagtaac catgatgagc taatgtccaa ctattttgca cagtctgatg cccttgcata 60
 tnnnaagaca gcagagcagc tgcnaaaggn caatgtttcc ccgcacctta ttccacacaa 120
 ga 122

<210> 685
 <211> 234
 <212> DNA
 <213> Glycine max
 <400> 685

tgataatcct ccaactcaaga taacatacat ggacaacacg gatcctgctg gaattgatca 60
 tcagattgca caacttgggc ctgagctagc ttcaacactt gtgattgtga tatcaaagag 120
 tggagggtact cctgagacca gaaatggttt attggaagtg cagaaggcct ttcgtgaagc 180
 aggcttggat tttcctaaac aggggtgtgc tataacacaa gaaaattctt tggt 234

<210> 686
 <211> 205
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 686

ttcctatggt tgatnggnnn ggaggtagaa cgtcagnnat gtctgcagtt ggctgcttc 60
 cagcagccct tccagggtt ganatnanag aaatgcttgc cgggtgcatca ttgatggatg 120
 angctaanag gagtactgtg nnaaggaata accctgcagc tctgctggct ttatgttggg 180
 attgggctac agatggtgna ggatc 205

<210> 687
 <211> 223
 <212> DNA
 <213> Glycine max
 <400> 687

tgcagggcgt tgctataact caagaaaatt ctttgctgga taacactgca agaattgagg 60
 gttggtttagc tagattttcca atgtttgact ggggtgggagg tagaacatca gagatgtctg 120
 cagtgggcct gcttccagca gcccttcaga gcattgacat aagagaaatg cttgctgggtg 180
 cagcattaat ggatgaggcg aataggagta ctgtgataag gaa 223

<210> 688
 <211> 218
 <212> DNA
 <213> Glycine max

<400> 688

tgcagggcgt tgctataact caagaaaatt ctttgctgga taagactgca agaattgacg 60
 gttggtttagc tagattttcca atgtttgact ggggtgggagg tagaacatca gagatgtctg 120
 cagtgggcct gcttccagca gcccttcaga gcattgacat aagagaaatg cttgctgggtg 180
 cagcattaat ggatgaggcg aataggagta ctgtgata 218

<210> 689
 <211> 274
 <212> DNA
 <213> Glycine max

<400> 689

gtgctacgtg atagacctcc tggcatgat tgggaacttg aacctggtgt ccacatgcgg 60
tgactacttg tttggtatgc tacagggaac aagatcagct ctgtatgcca ataaccgaga 120
gtccatcaca gttactgtac aagaagtgc acctagaaca gttggtgctc ttattgcact 180
ctatgaacga gcagtaggaa tttatgcctc ctttgtcaac ataaatgctt atcatcaacc 240
aggtgtggaa gctggtaaaa aagcagcagg tgaa 274

<210> 690

<211> 257

<212> DNA

<213> Glycine max

<400> 690

aacaattgag ggaagggtgta cacaatttct ttgtaacatt cattgaggtg ctacgtgata 60
gacctcctgg tcatgattgc gaacttgaac ctggtgtcac atgcggtgac tacttgtttg 120
gtatgctaca gggaacaaga tcagctctgt atgccaataa ccgagagtcc atcacagtta 180
ctgtacaaga agtgacacct agaactgttg gtgctcttat tgcactctat gaacgagcag 240
taggaattta tgcctcc 257

<210> 691

<211> 251

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 691

gattgggaac ttgaacctgg tgtcacatgt ggtgactact tgtttggtat gctacaggga 60
acaagggtcgg ctttgtatgc caataaccga gagtccatca cagttactgt acaagaaggg 120
acaccaagaa cagttggtgc tcttattggg ctctatgaac gagcagtagg aatttatgcc 180
tcccctgtca acataaatgc ttatctnaac ctgcgtgtgg aagntgacga natnagcagc 240
agngaagtac t 251

<210> 692

<211> 245

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 692

atcctgcanc ttgcnngct ttatgttggc attgggctac agatgggtgta ngatcaaaag 60
atatggttat ccttccatat aaggacagct nganattatn tagtagatac ttgcaacagt 120
nggtcatgga atctctaggc aaggagtttg actgaatggc aatcgggtta atcaaggaat 180
tagtgtctat ggaaataaag gaagcacaga tcagcatgcc tacatccaac aactgaggga 240
aggtg 245

<210> 693

<211> 270

<212> DNA

<213> Glycine max

<400> 693

cagcatgcct acattcagca actgagggaa ggtgtgcaca atttttttgt gacattcatt 60
gagggtgctac gcgatagacc acctgggtcat gattggggagc ttgaaccagg tgtcacatgt 120
ggtgactacc tgtttggtat gctacagggga acaagggtcag ccctgtatgc caataaccgt 180
gaatccatca ctgtcacagt gcaagaagtg acaccagat cagttgggtgc ccttgtagcc 240
ctttatgaac gggccgttgg aatatatgct 270

<210> 694

<211> 259

<212> DNA

<213> Glycine max

<400> 694

ggagtttgac ttgaatggta atcgggttaa tcaaggaatt agtgtctatg gaaataaagg 60
aagcacagat cagcatgcct acattcaaca actgagggaa ggtgtgcaca atttttttgt 120
gacattcatt gagggtgctac gcgatagacc acctgggtcat gattggggagc ttgaaccagg 180
tgtcacatgt ggtgactacc tgtttggtat gctacagggga acaagggtcag ccctgtatgc 240
caataaccgt gaatccatc 259

<210> 695

<211> 227

<212> DNA
<213> Glycine max

<400> 695

atagaagtac tgtgttaagg aataaccctg cagctctgct ggctttatgt tggatttggg 60
ctacagatgg tgtaggatcc aaggatatgg ttattcttcc gtacaaggac agcctgttat 120
tattcagtag atacttgacg cagctgggtca tggaatctct aggcaaggag tttgacttgg 180
atggtaatcg ggtaatacaa ggaattagtg tctatggaaa caaagga 227

<210> 696

<211> 263

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 696

ttcagggcat tgatattaga gaaatgcttg cnggtgcatc attgatggat gaggctaata 60
gaagtactgt gttaaggaat aaccctgcag cntgtctggc ttangnaagg tattgggcta 120
cagatgggtg aggaccaagg anatgggttat tcttccgtac aaggacagcc tngtattatt 180
cagtagatac ntgcagcagc tggatcatgga atctctaggc aaggagtgtg acttggatgg 240
taatcgggtt aatcaaggaa tag 263

<210> 697

<211> 266

<212> DNA

<213> Glycine max

<400> 697

gcgcgatcgc gaatcccgat gagagtcgca tgggtgggaca ctattggctg agggacccta 60
agcgtgcgcc caactcggtc cttaaaacgc agattgagaa cactctcgac gctgtttgca 120
agttcgctaa cgacgtcggt agtggttaaga ttaagcctcc ttctgtctccg gagggtcgat 180
ttactcaaat attgtctgtg ggaattggag gttctgctct tggaccacag tttgttgcag 240
aagcattggc acctgataat cctcca 266

<210> 698

<211> 398

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 698

gaataaatgg ttaaggcaaa aaggattacg gtgataagga ataatcctgc acctttgctg 60
gctttatggt ggtattgggc tacagatggt gtaggatcaa aagatatggt tatccttcca 120
tataaggaca gcttggttatt atttagtaga tacttgcaac agttggtcat ggaatctcta 180
agcaaggagt ttgacttgaa tggaatcgg gttaatcaag gaattagtgt ctatggaaat 240
aaaggaagca cagatcagca tgcctacatt cagcaactga nggaaggtgt gcacaatttt 300
tttgtgacat tcattgangt gctacgcgat agaccacctg gtcattgattg ggagcttgaa 360
caagtgtcac atgtggtgac tacctgtttg gtatgcta 398

<210> 699

<211> 362

<212> DNA

<213> Glycine max

<400> 699

gttggagaag ggcgcgatcg cgaatcccga tgagagtcgc atggtgggac actattggct 60
gagggaccct aagcgtgcgc ccaactcggt ccttaaaacg cagattgaga acactctcga 120
cgctgtttgc aagttcgcta acgacgtcgt tagtggttaag attaagcctc cttcgtctcc 180
ggagggtcga tttactcaaa tattgtctgt gggaattgga agttctgctc ttggaccaca 240
gtttgttgca gaagcattgg cacctgataa tcctccactc aagataagat ttgtggacaa 300
cacggatcct gctggaattg atcatcagat tgcacaactt gggcctgagc tagcttcaac 360
ac 362